

BHARATIYA VIDYA BHAVAN'S HISTORY AND CULTURE OF THE INDIAN PEOPLE VOLUME I

THE VEDIC AGE

THE HISTORY AND CULTURE OF THE INDIAN PEOPLE

THE VEDIC AGE

GENERAL BDITOR

R. C. MAJUMDAR

M A., PH D , F A.S., F.B.B.R.A.S.

Ex Vice-Chancellor and Professor of History

Dacca University

Hon, Head of the Department of History Bharatiya Vidya Bhavan

ASSISTANT EDITORS

A. D. PUSALKER

M.A., LL.B., PH D.

Assistant Director and Head of the Department of Ancient Indian Culture Bharatiya Vidya Bhavan

A. K. MAJUMDAR

M.A., D.PHIL.

Joint Director, Bharatiya Vidya Bhavan



BOMBAY
BHARATIYA VIDYA BHAVAN

CONTRIBUTORS

R. C. MAJUMDAR

M.A., PH.D., F.R.A.S.B.

Formerly Vice-Chancellor and Professor of History in the University of Dacca

RAO BAHADUR K. N. DIKSHIT

M.A., F.R.A.S.B.

Formerly Director-General of Archaeology, Government of India

D N WADIA

MA, BSC., FG.S., FR.G.S., F.R.A.S.B., F.N I.

Special Adviser to the Government of India

G P MAJUMDAR

M SC., PH D. (Leeds)
Professor of Botany in the Presidency College, Culcutta

B K. CHATTERJI

M SC

Lecturer in Zoology in the Presidency College, Calcutta

H D SANKALIA

MA, LLB, PH.D (London)

Professor of History in the Deccan College Post-Graduate and Research Institute, Poona

S K CHATTERJI

M A. D.LITI. (London) F.R A.S.B.

Khaira Professor of Indian Linguistics and Phonetics
in the University of Calcutta

A D. PUSALKER

M A., LLB., PH D

Assistant Director and Head of the Department of Sanskitt Bharatiya Vidya Bhayan

B K GHOSH

D PHIL (Munich), D.LITT (Paris)

Lecturer in Philology in the University of Calcutta

V. M. APTE

MA. PH.D (Cantab)

Professor of Sanskrit in the Karnatak College, Dharway

M A. MEHENDALE

M.A , PH D.

Professor of Sanskrit in S B. Garda College, Navasari, Bombay

HIRST PUBLISHED IN 1951 SECOND IMPRESSION 1952 THIRD IMPRESSION 1957 FOURTH IMPRESSION 1965

All rights reserved by the Publishers

PRINTED IN INDIA BY

P H RAMAN

AT ASSOCIATED ADVERTISERS AND PRINTERS 505, TARDEO ARTHUR ROAD, вомвау-34

AND

PUBLISHED BY

S RAMAKRISHNAN, EXECUTIVE SECRETARY, BHARATIYA VIDYA BHAVAN, CHAUPATTY ROAD, BOMBAY-7

FOREWORD

By DR K M MUNSHI

Is the course of my studies I had long felt the madequacy of our socalled Indian histories. For many years, therefore, I was planning an elaborate history of India in order not only that India's past might be described by her sons, but also that the world might cath a glimpse of her soul as Indians see it. The Bhäratya Vidyā Bhavan, an educational society which I founded in 1938, took over the scheme. It was, however, realized only in 1944, when my generous friend Mr. G. D. Birla, one of India's foremost industrialists, lent me has co-operation and the support of the Shri Krishnarpan Charity Trust of which he is the Chairman. As a result, the Bhäratiya Ithäsa Samiti, the Academy of Indian History, was formed with the specific object of preparing this series, now styled The History and Culture of the Indian People

The Samiti was lucky in securing the services of Dr. R. C. Majumdar, formerly Viec-Chancellor of Dacca University and one of India's leading historians, as full-time editor, and of Dr. A. D. Pusalker, a young and promising scholar, Assistant Director of the Bhāratiya Vidyā Bhavan, as assistant editor. A large number of Indian scholars of repute have lent their co-operation to the scheme. Professor H. G. Rawlinson has been good enough to undertake the task of revising the MS Messrs George Allen and Unwin Ltd rendered my work easy by undertaking its first publication in 1951, despite difficult publishing conditions in England, and have now been good enough to remit the publication rights to the Bhavan. To all of them I owe a deep debt of gratitude which I hasten to acknowledge

The General Editor in his introduction has given the point of view of the scientific historian, to which category the contributors belong My own work for the past thirty-five years has lain in the humbler sphere of weaving historical romances and literary and cultural studies out of materials so heroically salvaged by Indian and European scholars As a result I have seen and felt the form, continuity and meaning of India's past. History, as I see it, is being consciously lived by Indians Attempts to complete what has happened in the past form no small part of our modern struggle; there is a conscious as well as an unconscious attempt to carry life to perfection, to join the fragments of existence, and to discover the meaning of the visions which they reveal. It is not enough, therefore, to conserve, record and understand what has happened; it is necessary also to assess the nature and direction of the momentous forces working through the life of India in order to appreciate the fulfilment which they seek.

Some years ago, therefore, I defined the scope of history as follows: "To be a history in the true sense of the word, the work must be the story of the people inhabiting a country It must be a record of their life from age to age presented through the life and achievements of men whose exploits become the beacon lights of tradition, through the characteristic reaction of the people to physical and economic conditions; through political changes and vicissitudes which create the forces and conditions which operate upon life; through characteristic social institutions, beliefs and forms; through literary and artistic achievements, through the movements of thought which from time to time helped or hindered the growth of collective harmony; through those values which the people have accepted or reacted to and which created or shaped their collective will: through efforts of the people to will themselves into an organic unity. The central purpose of a history must, therefore, be to investigate and unfold the values which age after age have inspired the inhabitants of a country to develop their collective will and to express it through the manifold activities of their life. Such a history of India is still to be written"

I know the difficulties which beset the path of any enterprise which seeks to write such a history. In the past Indians laul little store by history. Our available sources of information are inadequate, and in so far as they are foreign, are almost invariably tainted with a bias towards India's conquerors

Research is meagre and disconnected.

Itihāsa, or legends of the gods, and Purōva, legends of origin, had different spheres in the ancient literary tradition of India but later, both came to mean the same thing, traditional history The Kali Yuga, the current Iron Age, was considered too degenerate a period to deserve recording The past was only cherished as the pattern for the present and the future Works by ancient Indian authors which throw light on history are few. Religious and literary sources like the Purōvas and the Kōvyas have not yet fully yielded up their chronological or historical wealth. Epigraphic records, though valuable, leave many periods unrelated.

Foreign travellers from other countries of Asia and from Europe, like Megasthenes of Greece, Hiuen Tsang of China, Al-Masudi of Arabia, Manucci of Venice, and Bernier from France, have left valuable glimpses of India, but they are the results of superficial observation, though their value in reconstructing the past is immense. Chroniclers in the courts of the Turk, Afghan or the Mughal rulers wrote "histories" which, in spite of the wealth of historical material, are partially legendary and partially laudatory. The attempts of British scholars, with the exception of Tod, wherever they have taken these "histories" as reliable source-books.

FOREWORD

have hindered rather than helped the study of Indian history. Sir H M. Elliot, the foremost of such scholars, for instance, has translated extracts from Persian and Arabic "histories" with a political objective, viz. to make, to use his own words, "the native subjects of British India more sensible of the immense advantages accruing to them under the mildness and equity of the present rule...." So high an authority as Dr. Maulānā Nadvi, in his Presidential Address at the "Early Medieval India" Section of the Seventh Session of the Indian History Congress, expressed the verdict of modern scholars, that both the selection and translation of these extracts have not been honest. But unfortunately. Elliot's volumes became the source-book for most of our modern histories of Medieval India. As a result, they do not present a true picture of India's past, nor do they explain how Indians resisted the Turk. Afghan and Mughal incursions, how they reacted to the vicissitudes through which in consequence they passed, and how a Renaissance sprang up out of the impact of Indian with Persian and Turkish cultures.

The treatment of the British period in most of our histories is equally defective. It generally reads like an unofficial report of the British conquest and of the benefits derived by India from it It does not give us the real India; nor does it present a picture of what we saw, felt and suffered, of how we reacted to foreign influences, or of the values and organizations we created out of the impact with the West.

The history of India, as dealt with in most of the works of this kind, naturally, therefore, lacks historical perspective. Unfortunately for us, during the last two hundred years we had not only to study such histories but unconsciously to mould our whole outlook on life upon them. Few people realize that the teaching of such histories in our schools and universities has substantially added to the difficulties which India has had to face during the last hundred years, and never more than during recent years.

Generation after generation, during their school or college career, were told about the successive foreign invasions of the country, but little about how we resisted them and less about our victories. They were taught to decry the Hindu social system; but they were not told how this system came into existence as a synthesis of political, social, economic and cultural forces, how it developed in the people the tenacity to survive catastrophic changes for millennia, how it protected life and culture in times of difficulty by its conservative strength and in favourable times developed an elasticity which made ordered progress possible; and how its vitality enabled the national culture to adjust its central ideas to new conditions

Readers were regaled with Alexander's short-lived and unfructuous invasion of India; they were left in ignorance of the magni-

ficent empire and still more enduring culture which the Gangetic Valley had built up at the time. Lurid details of intrigues in the palaces of the Sultans of Delhi—often a camp of bloodthirsty invaders—are given, but little light is thrown on the exploits of the race of heroes and heroines who for centuries resisted the Central Asiatic barbarians when they flung themselves on this land in successive waves. Gruesome stories of Muslim atrocuties are narrated, but the harmony which was evolved in social and economic life between the two communities remains unnoticed The Mutiny of 1857—the British name for the Great National Revolt—gave the readers a glimps of how the brave foreigner crushed India; it is only outside the so-called historical studies that the reader found how at the time patriotic men of all communities in most parts of India rallied round the last Mughal Emperor of Delhi, the national symbol, to drive out the hated foreigner.

The multiplicity of our languages and communities is widely advertised, but little emphasis is laid on certain facts which make India what she is Throughout the last two millennia, there was linguistic unity. Some sort of a lingua franca was used by a very large part of the country; and Sanskrit, for a thousand years the language of royal courts and at all times the language of culture. was predominant, influencing life, language, and literature in most provinces For over three thousand years, social and family life had been moulded or influenced by the Dharma-Sastra texts, containing a comprehensive code of personal law, which, though adapted from time to time to suit every age and province, provided a continuous unifying social force. Aryan, or rather Hindu culture (for there was considerable Dravidian influence) drew its inspiration in every successive generation from Sanskrit works on religion. philosophy, ritual, law and science, and particularly the two epics. the Mahabharata and Ramayana, and the Bhagayata, underwent recensions from time to time, and became the one irresistible creative force which has shaped the collective spirit of the people Age after age the best of Indians, from the mythical Vasishtha to the modern Gandhiji, found self-fulfilment in living up to an ideal of conduct in accordance with a code of life which may be traced back as far as the Upanishads.

The British conquest and the benefits of British rule are generally described in histories in "Rudyard Kipling" style The impact of western culture, however, came in the wake of the British connection. In our histories we completely lose sight of how this impact awoke the sleeping giant to a consciousness of its ancient strength and modern possibilities; how under the influence of European ideas and British democratic traditions, the Collective Spirit, without losing its grip over the essentials of its culture, adjusted itself to modern conditions, creating new intellectual

FOREWORD

and artistic movements and making the democratic traditions of Great Britain its own; how, under the European concept of nationalism Arya-Dharma (Indian Culture) slowly broadened out into a powerful neo-nationalism seeking a secular democratic state, Indian in conception and technique.

The older school of historians believed that imperialism of the militaristic political type was unfamiliar to this "mystic land." But the Aryan conquest of India, which forms the subject matter of Vol. I of this series, was as much militaristic-political as religious and cultural. If instead of treating by dynasties, stress is laid on the rise and fall of Imperial power. Magadhan sovereignty and Satavāhana imperialism from 600 B C, to A.D. 320 (Vol II) were, for the age, outstanding phenomena. If the territory involved, the population affected, and the heroism and power of organization displayed and the cultural activities pursued are taken into account. the Classical Age. A.D. 320-750 (Vol. III), which saw the empire of the Guptas and of Srī Harsha, was one of the culminating points in history. The age between A D 750-1000 (Vol. IV) saw the empire of the Pratihäras, the Räshtrakütas and the Pälas Between A.D. 1000 and 1300 (Vol. V), the Paramäras and the Cholas founded empires; different states struggled for imperial power; the barbarian inroads from Central Asia rendered all indigenous efforts at consolidation unfruitful.

The rise of the Turkish Power under Alā-ud-dīn Khiljī founded a new and powerful imperialism, the Sultanate of Delhi, which lasted from 1300 to 1526 (Vol VI) From A D 1526-1707 the Mughals held sway at Delhi (Vol. VII) when the world witnessed one of the most magnificent empires of all time. The Maratha supremacy, which lasted from 1707-1818 (Vol VIII), brought about the downfall of the Mughal Empire, but before it could consolidate its power, the British stepped in. British domination from 1818-1947 (Vols. IX and X) was a period of complete subjection; but it saw the national resurgence which, on August 15, 1947, under Mahātmā Gändhī, secured freedom by non-violent means. It also saw the birth of a Renaissance which gave fresh vitality to all that India stood for in history These militaristic-political movements in India were in no wise less vigorous or worldly than similar movements in other parts of the world in the corresponding age. To say that the country was lost in contemplation all the time would be to ignore the salient facts of history

The rôle of alien invasions in the history of India, hitherto exaggerated, deserves to be reduced to its appropriate proportions India, like most other countries, has had its foreign incursions, which, like Mahmūd of Ghazni's raids between A.D. 999 and 1024, glittering episodes from the raiders' point of view, were at best only shaping

influences. Of foreign conquests, which changed the course of history and the texture of life and culture, there were only three. First, the Arvan conquests in pre-historic times, which wove the essential pattern of national life and culture. Second, the Turko-Afghan conquests, which introduced Islamic influence into India and added new colours to the pattern of life. These conquests, however, soon lost their character of foreign military occupation, for the conquerors threw in their lot with the country and produced some of its best rulers and its most powerful political organizations. This so-called Muslim period, scientifically the Turko-Mughal period, dominated the country for about four centuries roughly from A.D 1300 to 1700. Third, the British occupation from 1818-1947, perhaps the only period of foreign rule in the sense that the country was governed essentially by foreigners from a foreign country and in foreign interests. It brought in its wake contact with Europe, a new awakening and a new cultural synthesis.

But during all this period the vitality of the race and culture. altered from time to time in direction and objective, expressed itself with unabated vigour in resistance movements, military, political, and cultural The History of India is not the story of how she underwent foreign invasions, but how she resisted them and eventually triumphed over them. Traditions of modern historical research founded by British scholars of repute were unfortunately coloured by their attitude towards ancient Egypt, Greece and Rome, which have a dead past and are, in a sense, museum exhibits. A postmortem examination of India's past would be scientifically maccurate; for every period of Indian History is no more than an expression in a limited period of all the life forces and dominant ideas created and preserved by the national culture, which are rushing forward at every moment through time. The modern historian of India must approach her as a living entity with a central continuous urge, of which the apparent life is a mere expression Without such an outlook it is impossible to understand India, which, though a part of it has seceded in search of an independent existence, stands today three hundred and fifty million strong, with a new apparatus of state, determined not to be untrue to its ancient self, and yet to be equal to the highest demands of modern life

CONTENTS

	Page
Foreword by K. M. Munshi	7
Preface by R. C. Majumdar	23
Abbreviations	31
BOOK I. INTRODUCTION	
Indian History, its nature, scope and method by R C. Majumdar, MA., PH.D., F.R.A.S.B. Formerly Vice-Chancellor and Professor of History in the University of Dacca	37
Sources of Indian History by R. C. Majumdar, I. Ancient Period. A—Literary Sources. B—Archaeology (I. Inscriptions. II. Numismatics III Monuments). C—Foreign Accounts (Greek Writers. Chinese Travellers. Arab Writers) 2 Mediaeval Period 3 Modern Period	47
Archaeological Explorations and excavations by the late Rao Bahadur K. N. Dikshit, M.A., F.R.A.S B Formerly Director General of Archaeology, Government of India. Decipherment of the Brahmi Script Beginings of Archaeological Survey. Establishment of Archaeological Department Regular and Systematic Excavations (Mohenjo-daro, Punjab and N. W. F.P., Käshmir, United Provinces, Bengal) Prehistoric remains in Gujarāt (Bombay, Mysore, Madras). Explorations in Greater India	66
The Geological Background of Indian History by D. N. Wadta, M.A. B.S., F.R.G.S., F.R.G., F.R.G.S., F.R.G., F.R.G.S., F.R.G., F.R.G.S., F.R.G., F	
	Preface by R. C. Majumdar Abbreviations BOOK I. INTRODUCTION Indian History, its nature, scope and method by R. C. Majumdar, MA., PH.D., DR.A.S.B. Formerly Vice-Chancellor and Professor of History in the University of Dacca Sources of Indian History by R. C. Majumdar, I Ancient Period A.—Literary Sources. B.— Archaeology (I. Inscriptions. II. Numismatics III Monuments). C.—Foreign Accounts (Greek Writers. Chinese Travellers. Arab Writers) 2 Mediaeval Period 3 Modern Period 3 Modern Period 3 Modern Period 4 Archaeological Explorations and excavations by the late Rao Bahadur K. N. Dukshit, MA., F.R.A.S B Formerly Director General of Archaeology, Government of India. Decipherment of the Brähmi Script Beginnings of Archaeological Survey. Establishment of Archaeological Department Regular and Systematic Excavations (Mohenjo-daro, Punjab and N. W. F.P., Käshmir, United Provinces, Bengal) Prehistoric remains in Gujarāt (Bombay, Mysore, Madras). Explorations in Greater India The Geological Background of Indian History by D. N. Wadua, MA., B.G., F.G.S., F.R.G.S., F.R.A.S.B., F.N. Special Adviser to the Government of India 1 The Setting of the Stage for Early Man in India 2. The Indo-Gangetic Alluvium of the Plains of North India 3 Human cave-dwellers of India: Their animal contemporaries 4 Laterite cap of the Peninsula and Soil Deposits 5 Changes in the River Systems of North India during the human epoch 6. The Great Prehistoric River of Northern India The Deserts of Western India: The Rann of Cutch 8 The meteorological influence of the Himālaya Mountains 9 Eartlugakes and Volcanoes

	THE VEDIC AGE	
		Page
	10 Late earth-movements and local Alterations of level	
v	The Geographical Background of Indian History by R. C. Majumdar	91
	1. Physical Features (I. The great mountain wall.	
	II. The Plain of Hindustan. III. The Plateau: A—The Decan Plateau, B—The Coastal Region, C—The Central Indian Plateau). Influence of Geography upon History. Division into several political and cultural units. India, a distinct geographical unit. Effect of physical features. Indian Colonization Effect of climate	
VI	Flora and Fauna	108
	Part I The Flora	
	by G. P. Majumdar, MSC, PH.D (LEEDS)	
	Professor of Botany in the Presidency College, Calcutta	
	1 Forest Vegetation; its types 2 Freshwater Vegetation 3. Cultivated Vegetation	
	Part II. The Fauna	
	by B. K. Chatterji, M.SC	
	Lecturer in Zoology in the Presidency College, Calcutta	
	 The Vertebrates Mammals Birds. Reptiles Batrachians. Fishes Lower Chordates The Invertebrates. Molluscs Arthropods Echinoderms 	
	BOOK II. THE PREHISTORIC AGE	
VII	Palaeolithic, Neolithic And Copper Ages	125
	by H D. Sankalia, MA., LL B., PHD, (LONDON)	
	Professor of History in the Deccan College Post-Graduate and Research Institute, Poona.	
	1 Palaeolithic Age (I. First Inter-Glacial Age II. Second Inter-Glacial Age and Early Soan Industry. III. Third Ice Age and Late Soan Industry IV. Third Inter-Glacial Age; Chauntra Industry. V. Fourth Ice Age Tools).	
	2 Mesolithic Age. 3. Neolithic Age. 4 Copper and Bronze Age. 5 Iron Age	.,
VIII	Race-Movements and Prehistoric Culture	143
	by S. K. Chatterji, M.A., D.LITT. (LONDON), F.R.A.S.B.	
	Khaira Professor of Indian Linguistics and Phonetics in the University of Calcutta.	
	14	

CONTENTS Six main races with sub-types. Evolution of Com-

mon Indian Culture. Contribution of (a) the Negroid or Negrito, (b) the Proto-Australoids, (c) Dravidian-speakers Synthesis of the Aryan and nonPage

222

The	Indus Valley Civilization	172
by .	A D Pusalker, MA., LL.B., PH.D.	
	istant Director and Head of the Department of skrit, Bhāratiya Vidyā Bhavan	
1	The Town (Buildings. Drainage The Great Bath)	
2	Social and Economic Life (Food. Animals Dress) Ornaments. Toilet Articles. Household Utensils Games Conveyance. Weight and Lanear Measures. Medicine Weapons, Tools, and Implements. Trade and Commerce. Classes of People)	
3	Arts, Crafts, and Industries (Figures. Seal- engravings. Statues. Spinning and Weaving. Pottery. Seals Precious Stones and Metals. Shell, Ivory, and Faience)	
4	Religion (Mother Goddess. Siva Animal Worship Worship of Tree, Fire, and Water)	
5	Funerary Customs	
6.	The Indus Script	
7.	The Antiquity of the Culture	
8	Authors of the Indus Civilization	
9	Extent, Connections, and Survivals of the Indus Civilization	
	BOOK III THE ARYANS IN INDIA	
The	Aryan Problem	205

XI Indo-Iranian Relations

Mysore

Arvan Culture.

IX

х

by B. K. Ghosh
Cleavage between the Aryans of India and Irān
Antagonism between the Worshippers of Daivagods and Asura-gods. Reforms of Zarathustra Pre-

by B. K. Ghosh, D.PHIL., (MUNICH), D.LITT. (PARS)
Lecturer in Philology in the University of Calcutta
Original home of the Indo-Europeans. Earliest trace
of the Indo-Irānians. Lithuanian, the most archaic
of Indo-European Languages. No case for original
home in Europe. Scandinavia not the original
home Tripoje culture. Brandenstein's theory of
the Original Home Relation between Indo-European and non-Indo-European languages
Appendix—India, the original home of the Aryans
by S. Srikants Sastri, Professor Maharaja's College,

		Page
	Zarathustra Irānıan Culture essentially the same as $\mbox{\sc Vedic}$	
XII.	Vedic Literature—General View by B. K. Ghosh	229
	The Sāmhitās (I. Rigveda. II. Sāmaveda. III Yajurveda. IV. Atharvaveda). The Brāhmaṇas The Srauta-sūtras	
XIII.	Aryan Settlements in India	245
	by A. D. Pusalker	
	 Geographical Names in the Rigveda The Tribes in the Rigveda The Period of the Later Samhitäs, Brähmanas, Upanishads and Sütras (I Geographical Names. II The Tribes) 	
	BOOK IV. HISTORICAL TRADITIONS	
XIV.	Traditional History from the Earliest Time to the Accession of Parikshit	271
	by A D. Pusalker	
	1 Sources of Information 2 Chronological Scheme of Traditional History	
	according to the Puranas 3 Pre-Flood Traditions and Dawn of History	
	 Flood and Manu Varvasvata c 3100 B C. Yayātı Period (c. 3000-2750 B.C.) (I The Lunar Dynasty, II. The Solar Dynasty. III Brāh- mana Families) 	
	6 Mandhatri Period (c. 2750-2550 B.C.) (I The Solar Dynasty, II. The Lunar Dynasty)	
	 Parasurāma Period (c. 2550-2350 B C.) (I. The Bhrigus. II. The Haihayas. III. Other Lunar Dynasties. IV. The Solar Dynasty. V. Brāhmaņa Families) 	
	 Rāmachandra Period (c. 2350-1950 B C.) (I. The Solar Dynasty, II. The Lunar Dynasty, III Brāhmaņa Families) 	
	 Kṛishna Period (c. 1950-1400 B.C.) (I. The Panchalas. II. The Pauravas. III. The Yadavas. IV. The Eastern Anavas, V. The Solar Dynasty) 	
	10 The Bhārata War (c. 1400 B.C.) (I. The Kauravas and Pāṇḍavas. II The Bhārata War)	
	11 Comparative Value of the Vedas and the Puranas as Sources of Traditional History	
	12 The Expansion of the Aryans and Aryan Cul- ture	
	Appendix I · Development of different dy- nasties	
	Appendix II: Genealogical Tables	
	16	

CONTENTS

Page

XV.	Traditional History from the Accession of Parikshit to the end of the Barhadratha Dynasty		
	by A D. Pusalker		
	1. The Pauravas 2. The Kosalas 3. Magadha 4. Other Kingdoms		
	BOOK V. THE AGE OF THE RIK-SAMHITA		
XVI		337	
	by B. K. Ghosh		
	1 Language (Not homogeneous Artificial Rehandling of original texts. The Verbal system Tenth Mandala distinctly later) 2 Literature (Yāska's Classification of Vedic hymns not quite satisfactory. Hymn to Ushas Spirit of the hymns Hymn to Parjanya. Martial hymns Dalogue-hymns Frog-hymn Dānastuti Apri-hymns Funeral-hymns. Philosophical hymns)		
XVII	Political and Legal Institutions	355	
	by V. M. Apte, MA, PH.D (CANTAB)		
	Professor of Sanskrit in the Karnatak College, Dharwar		
	1 Political Institutions (Monarchy, Sabhā and		
	Samit. Purohita) 2 Administrative Organization (Grāma) 3 Law and Legal Institutions (Individual ownership of Land)		
XVIII	Religion and Philosophy	363	
	by V. M Apte		
	1 Mythology (I. Origin II The Nature and Classification of Gods. III. The Celestial Gods IV The Atmospheric Gods V The Terrestrial Gods) Sacrifice 2 Philosophy 4 Ethical and Spiritual Thought		
XIX	Social and Economic Conditions	387	
	by V. M. Apte 1 Social Condition (I Family Life II The Caste System III Marriage and the Position of Women. IV. Education V Amusements and Entertainments VI. Eood and Drink VII Dress and Decoration. VIII Knowledge of Medicine and Sanitation) 2. Economic Condition (I Agriculture and Cattle		
	II Trade and Commerce. III. Occupations and Industries IV House-building and Means of Transport etc.)		

THE VEDIC AGE $BOOK\ VI\quad \mbox{THE AGE OF THE LATER SAMHITAS}$

by B. K. Ghosh (Section 4 by V. M Apte)

XX. Language and Literature

Page

407

	1 The Language of the Sarihitiss (I. Samaveda II Yajurveda III Atharvaveda) 2 The Sarihiti Literature (I. Atharvaveda, Arregance of the Brāhmapas, Coronation hymn, Bhumi-sūkta, the National Anthem of Vedic India, Magic and Charms, Hymn to Varuņa II Yajurveda) 3 The Brāhmaṇas (I Language. II Literature) 4 The Aranyakas	
IXX	Political and Legal Institutions	429
	by V. M. Apte	
	 Political Theory (Origin of Kingship Growth of royal power Sabhā and Samiti) 	
	2 Administrative Organization (Royal Officials Taxation)	
	3 Law and Legal Institutions (Evidence Criminal law Civil law Civil procedure Ownership of Land)	
XXII	Religion and Philosophy	442
	by V M Apte	
	1 Atharvaveda (Magic Formulae Philosophical	
	hymns) 2 The Samaveda and the Yajurveda Samhitas and the Brahmanas (Grand Sacrifices Groups of priests. The Gods. Ethical Ideas. The conception of Heaven and Hell The Circuit of Birth and Death) 3 The Aranyakas	
IIIXX	Social and Economic Conditions	453
	by V M. Apte	
	1 Social Condition (I Family Life II The Caste System III Marriage and the Position of Women IV. Education V Amusements and Entertainments VI. Food and Drink. VII Dress and Decoration VIII Knowledge of Medicine.	
	2 Economic Condition (I Agriculture and Cattle II Trade and Commerce. III. Occupations and Industries IV House-Building and Means of Transport)	
BOOK	VII THE AGE OF THE UPANISHADS AND SUTRA	AS
XXIV	Language and Literature	471
	by M. A Mehendale M.A., PH.D.	
	Professor of Sanskrit in S B Garda College, Nava- sari Bombay	

CONTENTS

			Page
	1.	The Upanishads (Chronological classification. Composed mainly by the Kshatriyas, Principal tcachings. The doctrines of Atman and Brahman Transmigration)	
	2	The Sūtras (I. Sıkshā. II Kalpa. Śrauta-sūtra. Grihya-sūtra. Dharma-sūtra. Śulva-sūtra Date of the Kalpa-sūtra, texts III. Vyākarana-	
	3	IV. Nırukta. V Chhandas. VI. Jyotisha) Language (I The Upanishads. 11. The Sūtras)	
XXV	Po	olitical and Legal Institutions	487
	by	V. M Apte	
	1	Political Theory (Principle of Dharma Life and duty of king Position of the Brahmana in the State, Parishad)	
	2	Administrative Organization (Taxation Vil-	
	3	lage) Law and Legal Institutions (Beginnings of Civil and Criminal Law. Judicial tribunals. Punishments Rules of Inheritance. Title to Property. Rate of Interest)	
XXVI	Reh	gion and Philosophy	498
	by	V M. Apte	
	1.	The Upanishads (Protest against ritual. Identity of Brahman and Atman. Prāṇa. The transmigration of the soul. Ethical concepts. Fundamental doctrines)	
	2	The Sutras (The Srauta sacrifices: The Grihya ritual Meaning and nature of sacrifice Different classes of priests Magic and rituals. Ethical concepts)	
XXVII	So	cial and Economic Conditions	512
	by	V M Apte	
	2.	Social Condition (I. Family Life. II The Caste System III Marriage and the Position of Women IV Education. V Manners and Morals, Habits and Customs VI. Amusements and Entertainments. VII. Food and Drink VIII. Dress and Decoration. IX Health and Hygiene! Economic Condition (I. Agriculture and Cattle. II Trade and Commerce. Arts and In-	
		dustries III House-building and Means of Transport)	
		bliographies	533
		opendix	549
	In	dex	554



LIST OF ILLUSTRATIONS

between pages 176 and 177

LΑ		
 -		ч

I Corbelled	Drain,	Mohenjo-daro
-------------	--------	--------------

- II. Great Bath, Mohenjo-daro
- III. Jewellery-Necklaces, Mohenjo-daro
- IV Personal Ornaments, Mohenjo-daro
- V Arts and Crafts, Mohenjo-daro
- VI Statuary, Harappā and Mohenjo-daro
- VII Seals, Mohenjo-daro
- VIII (I) Fractional Burial, Mohenjo-daro
 - (2) Model Animal, Mohenjo-daro

MAPS AND PLANS

1	and Botanical Regions of India page	552
2	Prehistoric and Vedic India page	553

PREFACE

by R. C. Majumdar, M.A., PH.D, F R A.S B.

The genesis of this work and its scope and nature have been explained in the Foreword. But it is necessary to add a few words about its general planning. After having decided that the work would consist of ten volumes of approximately five hundred pages each, it was not an easy task to distribute the subject-matter among them on a basis which would be both equitable and rational. It has been hitherto customary to divide Indian history into the Hindu, Muslim and British periods, and assign equal space to each. The Cambridge History of India has set its seal of approval upon this plan, which has also been adopted by the Indian History Congress for its projected history of India. But it can hardly be regarded as equitable. Looking at the matter from a broad standpoint, it would be difficult to maintain that the 4,000 years of pre-Muslim India, of the history and culture of which we posses a definite knowledge, though in brief outline, should rank in importance as equal with that of the Muslim period of about 400 or 500 years, or the British period of less than 200 years. It is true that we possess more historical material for the later ages, but if we are to judge by that standard alone, the British period should have twice or thrice the number of volumes assigned to the Muslim period After all, the contribution of different ages to the evolution of national history and culture should be the main criterion of their relative importance. though the space devoted to each should also be largely determined by the amount of historical material available. There is, no doubt. a dearth of material for the political history of ancient India, but this is to a large extent made up for by the corresponding abundance for the cultural side Taking everything into consideration we have modified the hitherto accepted plan, and have allotted nearly half of the entire work to the Hindu period.

Some difference will also be noticed in our conception of the beginning and end of the Muslim period. It is usual to regard the accession of Qutb-ud-din to the throne of Delhi in A.D. 1206 as the commencement of this period, and some historians even include within it the period of Ghaznivite supremacy in the Punjab two centuries earlier. It should be remembered, however, that the major part of India remained under Hindu rule almost throughout the thirteenth century A.D and the same was also largely true of the century following the death of Aurangzeb. To include these two centuries under the Muslim period can therefore be hardly regarded as historically accurate.

These difficulties can best be overcome by avoiding altogether

PREFACE

cision and accuracy, they should not be strictly equated with the title given to it. The period of Marāṭhā supremacy, for example, cannot be said to cover exactly the years A.D. 1707 to 1818, but nevertheless these have been taken to be the limiting dates of Volume VIII, which bears that title, because they mark definite events of great importance connected with the central theme, viz. the death of Aurangzeb which facilitated the growth of Marāṭhā power, and the Third Marāṭhā War which put an end to the Marāṭhā supremacy

The same is more or less true of the other volumes and the justification for the titles and dates will be discussed in the preface of each. For the present we may confine our attention to the present volume Although it is entitled the Vedic Age it begins from the dawn of human activity in India, so far as it is known to us Being the first volume of the series, it contains an introductory section dealing with certain general topics bearing upon the history of India as a whole As there are some special characteristics which distinguish Indian history from that of other countries, it has been thought desirable to explain at the very outset its meaning and methods of approach as well as the nature of the material from which it has been reconstructed. The first three chapters have been devoted to this subject. The next three deal with the background of Indian history, geological, geographical and biological. These chapters, particularly the first and third, may appear too technical for the historical student, and some may even regard them as too elaborate for a treatise on history at all But a knowledge of these topics is essential for a proper understanding of the evolution of Indian culture, and being written by acknowledged experts, these two chapters, it may be hoped, will place at the disposal of the reader adequate information on difficult but relevant subjects, which it would not be possible for them to acquire except by the patient study of bulky volumes of a highly technical nature, which few would be disposed to undertake

The next section, which may be regarded as the beginning of history proper, deals with the period before the Vedic Aryans settled in this country. This, however, involves certain assumptions which are not unanimously accepted. Some scholars hold the view that India was the original home of these Aryans, and that there cannot be any question of their immigration into this country. Some have referred the Aryans to such hoary antiquity—tens of thousands of years ago according to more than one theory—that there can be no question of any historical period prior to them.

Similarly there is a divergence of opinion regarding the question whether the Indus valley civilization was pre-Aryan or post-Vedic. In the present state of our knowledge no dogmatic answer can be

the terms Hindu and Muslim. As a matter of fact, one may rightly question the reasonableness of designating historical periods by the religious denomination of the ruling dynasties. In that case, in order to be consistent, we should style the third period of Indian history Christian rather than British. This is sufficient to demonstrate the absurdity of the present system of nomenclature, deep-rooted though it has become We have accordingly divided Indian history into three chronological periods—Ancient, Mediaeval, and Modern—which are generally adopted for the history of Europe

In the case of Europe, the overthrow of the Western Roman Empire by the irruption of barbarian hordes, which brought about the disappearance of classical learning, is taken to be the dividing line between Ancient and Mediaeval periods. In the case of India, there is no general agreement on this subject, but the onslaught of Islam, accompanied by a marked decadence of culture and the disappearance of the creative spirit in art and literature, seems to mark A. D. 1000 as the beginning of the Mediaeval Age

The decline of the Mughal Empire and the growing power of the European nations in Indian politics may be reasonably regarded as marking the end of one and the beginning of another epoch in Indian history, and hence the eighteenth century has been taken as the commencement of the Modern Period In Europe the Modern Period dates from the overthrow of the Eastern Roman Empire and the subversion of the age of faith and tradition by the awakening of humanism through the agency of the revival of classical learning. On this analogy one might be inclined to include the eighteenth century within the Mediaeval rather than the Modern period But the political considerations referred to above, especially the establishment of the British power on a solid basis, are strong arguments in favour of dating the beginning of the Modern Period from the eighteenth century rather than the nineteenth

For reasons given above, neither the thirteenth nor the eighteenth century A D has been included within what is usually described as the Muslim Period. The first is taken as a part of a long period of protracted struggle for political supremacy, both between the Indians and foreign invaders and among the Indians themselves, which ultimately ended in the next century in favour of the Khillis. So far as the eighteenth century is concerned there is no doubt that the Marāṭhās were the leading political power in India. These two volumes have been styled accordingly.

So far by way of explanation of the general division into three broad periods—Ancient, Mediaeval, and Modern—and the title given to Volumes V and VIII, which mark a great departure from current practice It must be remembered, however, that while specific dates had to be assigned to each volume for the sake of pregiven to these questions, and there is no theory that is likely to meet with general acceptance. Even our own contributors do not agree on these points. Dr. Pusalker, who has written on the Indus Valley Civilization, is inclined to regard it as not fundamentally different from the Aryan, and possibly posterior to Rigvedic culture, while Dr. B. K. Ghosh and Dr. S. K. Chatterji, who have written on the Aryan and pre-Aryan peoples, take the opposite view. Such differences are inevitable in a co-operative undertaking of this kind. It has not been thought advisable to suppress these individual view-points, but cross-references have been given in order to impress upon the readers that such questions do admit of different answers and to enable them to judge for themselves the cogency of the arguments on which different theories are based.

It has been the constant attempt of the Editor, by free and frank discussions, to reconcile the different points of view as far as practicable, and where complete agreement was unattainable, to have them presented in a manner which would convey the impression that they are not adognatic assertions of contradictory views, but alternative solutions, each equally valid, of the problem concerned. Beyond that the Editor did not choose to go, by way of forcing a definite solution of an admittedly controversial problem. It has been thought better to risk even a seeming inconsistency among the different parts of the book rather than convey a false idea of a general agreement of views where no such unanimity really exists, or is possible under the present circumstances.

The third section is devoted to a general consideration of the Chief Indo-Aryans It begins with a detailed discussion of the chief problems concerning them, viz. their original home, the date and route of their immigration into India, the antiquity of their chief literary production, the Ripveda, and their relations with the Iranians with whom they must have lived in close and intimate contact long after their separation from the other branches of the Indo-European family. These are some of the most intriguing problems on which opinions differ widely, and an attempt has been made to present the different viewpoints, with emphasis on the one which appears to be most reasonable in the light of the evidence available to us Although few scholars today believe India to be the original home of the Aryans, this theory has naturally a sentimental appeal to Indians, and has therefore been discussed in some detail in an Appendix to Chanter X.

The fourth section deals with the political history of the period. It has been customary intherto to rely for such knowledge only on the few scattered historical notices contained in the Rigueda. Pargiter's attempt to reconstruct a continuous historical narrative from the data, particularly the royal genealogies, contained in the Puranas and the Epics, has been systematically ignored in historical

PREFACE

works, even in the comprehensive Cambridge History of India. But, in spite of obvious shortcomings, Pargiter's theories cannot be altogether discarded even on their merits, and the fact remains that they offer the only fair basis on which the ancient political history of India can be built up. So instead of being content to glean a few isolated facts from the Rigveda, as has hitherto been done, we have tried to trace a brief outline of the traditional history of early India on the lines laid down by Pargiter. This must not, of course, be confused with history proper, but it possesses none the less great value of its own, both as a tangible framework for connecting a number of well-authenticated facts, and as a basis for further investigation of our historical knowledge of this obscure period. Pargiter has at least successfully demonstrated that it is a mistake to regard such great historical figures of antiquity as Pūru, Mandhata, Nahusha, Yavātı, Kārtavīrva Arjuna, etc., as mere fancıful and mythological names, and any theory which gives them some sort of historical setting cannot but be regarded as of great value to students of Indian history.

In spite of the limitations of our knowledge of the political instory of the period, there can be no doubt that its chief interest and importance he in the picture of culture and civilization offered by the vast field of Vedic literature. Whereas everything else is but vaguely known, we possess nearly full information about the growth and gradual evolution of the Indian civilization from the well-marked stratification of the mass of literature, collectively known as the Vedas. It is also a matter of general knowledge that this civilization is the common basis on which succeeding generations of diverse races and localities have built up the imposing structure known as the Hindu civilization. This would explain why this volume has been entitled The Vedic Age, and detailed study has been made of it in three different sections, corresponding to the three well-marked stages of the evolution of Vedic Iterature.

There is a general agreement among scholars about the chronological sequence of Vedic Interature the Rik-Sainhitā representing the earliest stage, the other Sainhitās and Brālmaṇas the next, and the Upanishads and Sūtras the concluding one. But while these chronological divisions are, broadly speaking, accurate, it is to be noted that they are to some extent overlapping, and it is difficult to draw an absolutely rigid line of demarcation between them It likely, for example, that some portions of the Atharoa-Sainhitā are as old as, if not older than, portions of the Rik-Sainhitā, and some of the oldest Upanishads certainly reach back to the Brāhmaṇa period. Nevertheless the general outlook of the three different categories of literature is sufficiently distinct to label them as belonging to three successive chronological periods, and they have been dealt with accordingly in three separate sections.

It is, however, a difficult problem to assign definite dates to the three literary stages of the Vedic period. In spite of extravagant theories about the antiquity of the Rik-Samhita, the view that it received its present form about 1000 B.C. has much to commend itself. Though mainly based on philological grounds, as enunciated in Chapter XII, this theory finds unexpected support even from Indian traditions For some of the kings referred to in the Rik-Samhitā seem to be identical with those mentioned in the royal genealogies and occupying a low place in the dynastic list Further, as Pargiter has pointed out, "the Epic and Puranic tradition unanimously and repeatedly declares that the Veda was arranged by Vyāsa," who flourished about the time of the Bhārata War. which has been dated between 1500 and 1000 B C. by many scholars Whatever we might think of this date, it is important to remember that along with the doctrine that "the Veda is eternal and everlasting," there are also ancient traditions to the effect that it was compiled by Vyasa not long before the great Bharata War The view that dates the Rik-Samhita, in its present form, to about 1000 BC, cannot therefore be regarded as absolutely wide of the mark and altogether without any basis of support in Indian tradition. But it must be remembered that although the Rik-Samhitā might have received its final shape in about 1000 B C, some of its contents are much older, and go back certainly to 1500 B C, and not improbably even to a much earlier date

There is no doubt whatsoever that the oldest Upanishads are pre-Buddhist, and some of them at any rate belonged to the seventh century B.C., if not earlier still The later Samhitās and Brāhmaṇas accordingly may be placed, generally speaking, in the ninth and eighth centuries B.C. These dates are of course only provisional and are set down here as merely working hypotheses

No precise date can be assigned to the end of the Vedic Age, for the Sütras and Upanishads, representing the last stage of Vedic Interature, contain texts of varying antiquity. While, as mentioned above, some of them are probably as old as the seventh century B C, if not older still, others are probably as late as the third or fourth century B C Although, therefore, the Vedic Age cannot be regarded, strictly speaking, as having come to an end in 600 B.C. with which this volume closes, this date has been selected mainly for two reasons. In the first place, the sixth century B C. Saw the rise of Buddhism, Jainism, and other religious sects heralding that Protestant movement which was destined to bring to an end the unquestioned supremacy of Vedic religion and culture. Secondly, our knowledge of political history becomes more precise and definite from the sixth century B.C., and we can clearly perceive how the stage was gradually set for the rise of the great Magadha

PREFACE

empire which constitutes the most distinguishing feature of the succeeding period

Although the age of the Sütras and Upanishads extends beyond 600 B.C., culturally it is a direct offshoot and a continuation of the earlier Vedic civilization, and reflects no special characteristic of the later era, such as we find in the Epics, Purānas, or Buddhist and Jama literature. It has, therefore, been included in the volume dealing with the Vedic Age even in disregard of the strict limitations of chronology.

This volume attempts a picture of what may be regarded as the dawn of Hindu civilization. To continue this metaphor, we may say that the next two volumes reflect its full morning glory and noonday splendour; in the fourth volume we come across the shadows of the declining day, while dusk sets in with the fifth Then follows the darkness of the long night so far as Hindu civilization is concerned, a darkness which envelops it even now. This gives a broad idea of the distribution of the first five volumes of this series.

The Editor takes this opportunity of offering his sincere thanks to the contributors of this volume for their hearty co-operation, and to Professor H G Rawlinson for having kindly revised the MS

He notes with great regret that one of the contributors, Rao Bahadur K N Dikshit, late Director-General of Archaeology, Government of India, passed away while the book was in the press, and takes this opportunity to convey his condolence to the bereaved family. His death has been a serious loss to Indian Archaeology.

The Department of Archaeology, Government of India, has kindly supplied us with photographs for which we express our hearty thanks to the authorities

Some amount of repetition or overlapping is inevitable in a book of this kind where different authors deal with literature and the philosophical, religious, and social ideas mainly derived from it, and where the different chanters are closely related to one another.

The system of transliteration adopted in this volume is that followed in the Epigraphia Indica The geographical names have been spelt as in the Imperial Gazetteer, with a few exceptions such as "Krishnä" for "Kistnä," "Narmadä" for "Narbadä" Diacritical marks have not been used, as a rule, in geographical names and oriental words with an English suffix (Puranic, Rigvedic, Brahmanical, etc.) except to indicate the long a sound (ä). In the word Aryan, however, the a has not been lengthened as it may now be regarded as almost a naturalized English word

In addition to footnotes, general references have been added at the beginning of some chapters in order to indicate books or articles in periodicals which have been extensively used or frequently referred to in the body of the text. No footnotes have been given

in Chapter II as all the works cited therein will be dealt with in detail in subsequent chapters.

A Bibliography has been added for the convenience of those readers who wish to make special studies of any particular topic. As most of our knowledge regarding the history and culture of the Vedic Age is derived from Vedic literature, and a large number of secondary texts also deal with the period as a whole, a General Bibliography has been given at the end which covers the topics dealt with in Books IV, V, VI, and VII. Generally speaking the Bibliography is selective in character and does not aim at giving an exhaustive list of works on the subject. The only exception to this is the Bibliography to Chapter IX where an attempt has been made to give a list of all important contributions on the Indus Valley civilization, as the subject is comparatively new and controversial in character, and it is difficult to assess the proper value of the different theories. As copious footnotes have been given in many chapters, important references indicated therein have not been included

ABBREVIATIONS

ABIA. Annual Bibliography of Indian Archaeology,

ABORE Annals of the Bhandarkar Oriental Research In-

stitute, Poona. Ancient Egypt, London. AE

AIHT. Ancient Indian Historical Tradition, by F. E.

Pargiter.

Ait. Br. Artareva Brāhmana. American Journal of Archaeology, Philadelphia. AJA

Altindisches Leben, by H. Zimmer. AT.

Anthrop. Soc. Bom. Jub Vol Anthropological Society of Bombay, Jubilee

Volume. AP. Aryan Path, Bombay. Ap. Dh.S Apastamba Dharma-sūtra.

Ap SS. Apastamba Śrauta-sūtra. Annual Report of the Archaeological Survey of ASI

India. ASS. Anandāśrama Sanskrit Series, Poona.

AV. Atharvaveda.

Baudhāyana Dharma-sūtra. Bau. Dh.S. Ban SS Baudhayana Srauta-sūtra.

BDCRI Bulletin of the Deccan College Research Insti-

tute. Poona. Bulletin de-l'École Française d'Extrême-Orient, BEFEO

Bhāratīva Itıhāsakī Rūparekhā (in Hındi), Vol. RIR I, by Jaya Chandra Vidyalankar.

BMFA. Bulletin of the Museum of Fine Arts, Boston. Br. Brāhmana.

Brib Brihadāranuaka Upanishad. BSOS Bulletin of the School of Oriental (and African)

Studies, London.

BV Bharatiya Vidyā, Bombay. CAG. Cunningham's Ancient Geography of India, Ed.

by S. N Majumdar. CAH.

Cambridge Ancient History. Chronology of Ancient India, by S. N. Pradhan. Chanhu-daro Excavations, 1933-36, by E J. H. CAI. Chan-d.

Mackau. Chhänd. Chhāndogya Upanishad.

Cambridge History of India. CHI.

Comm. Vol. Commemoration Volume. CR. Calcutta Review, Calcutta. CS. Current Science, Bangalore.

Cultural Heritage of India. Published by Sri Cult. Her Rāmakrishņa Centenary Committee, Calcutta-Dh. S. Dharma-sūtra.

DKA Dynasties of the Kali Age, by F. E. Pargiter. EI. Epigraphia Indica, Delhi, ERE. Encyclopaedia of Religion and Ethics, Ed. by J.

Hastings.

Gautama Dharma-sūtra. Gau. Dh S.

Geographical Dictionary of Ancient and Medie-GD.

vai India, 2nd Edn., by N. L. Dey.

Geological Magazine. Geol. Mag.

Grihva-sūtra. Gr. S.

Excavations at Harappa, by M. S. Vats. Harappa.

Harivaméa (Bombay Edition). Harı. History of Ancient Sanskrit Literature, by I. HASI.

Max Muller.

History of Indian Literature. HIL. History of Indian Philosophy, Vol II, Creative HIP

Period, by S. K. Belvalkar and R. D. Ranade. Harvard Oriental Series, Cambridge, Mass. HOS HSL. History of Sanskrit Literature, by A. B. Keith.

IA. Indian Antiquary, Bombay. IAL. Indian Art and Letters, London, Indian Culture, Calcutta. IC.

IHO Indian Historical Quarterly, Calcutta. ILN. Illustrated London News, London,

Ind. Antiquities. Studies in Indian Antiquities, by H. C. Raychaudhuri

Ind Sc. Congress.

Indian Science Congress.
Indische Studien, by A. Weber. Ind. Stud

Indian Philosophy, by S. Radhakrishnan. Journal Asiatique, Paris. IP.

JA JAHRS Journal of the Andhra Historical Research

Society, Rajahmundry. Jaiminiya Grihya-sütra. Jai G.S

JAOS. Journal of the American Oriental Society JASB Journal of the Assatic Society of Bengal, Cal-

JBHS Journal of the Bombau Historical Society, Bom-

JBHII Journal of the Benares Hindu University, Bena-

JBORS Journal of the Behar and Orissa Research So-

ciety, Patna. Journal of the Greater India Society, Calcutta. **JGIS** JGRS Journal of the Gujarat Research Society, Bom-

JIH

Journal of Indian History, Madras. JISOA. Journal of the Indian Society of Oriental Art, Calcutta.

JMU. Journal of the Madras University, Madras-JOR Journal of Oriental Research, Madras.

JRAI. Journal of the Royal Anthropological Institute of Great Britain and Ireland, London. JRAS

Journal of the Royal Asiatic Society of Great Britain and Ireland, London. JRASB(L). Journal of the Royal Asiatic Society of Bengal,

Letters, Calcutta. JRASB(S)

Journal of the Royal Asiatic Society of Bengal,

Science, Calcutta

Journal of the Royal Society of Arts, London. JRSA. Journal of the Sind Historical Society, Karachi. JSHS.

ABBREVIATIONS

JUB. Journal of the University of Bombay, Bombay. JUPHS. Journal of the U.P. Historical Society, Luck-

now. Katha (or Kāthaka) Upanishad.

Kau. S. Kausika Sütra. Kanshī. Kaushitakı Upanishad.

Katha.

Kena. Kena Upanishad.

KHDS History of Dharmasastra, by P. V. Kane. Karnatak Historical Review, Dharwar. KHR.

KZ. Kuhn's Zeitschrift. MAGW. Mitteilungun der Anthropologischen Gesells-

chaft in Wien. Manava G.S. Mänava Grihya-sütra.

Manu. Manusmriti.

MASI. Memoirs of the Archaeological Survey of India Mbh Mahābhārata (= Bombay Edition, unless spe-

cifically stated otherwise).

Mbh (Cr Ed) Critical Edition of the Mahabharata, published by the Bhandarkar Oriental Research Institute, Poona (used for the first five Parvans hitherto published).

Mem Geol Surv Memoirs of the Geological Survey of India

Ind Further Excavations at Mohenjo-daro, by E J. Moh Exc H. Mackau.

Mohenjo-daro and the Indus Civilisation, by J. Moh. Ind Marshall.

MR Modern Review, Calcutta. Mundaka Upanishad.

Mund New Light on the Most Ancient East, by V. New Light.

Gordon Childe. NIA New Indian Antiquary, Bombay.

New Review, Calcutta. NR Orientalische Literaturzeitung, Leipzig.

OLZ.

Pañch. Br Pañchavimśa Brāhmaņa. PBA. Proceedings of the British Academy

PHAT Political History of Ancient India, 4th Edn., by

H. C Raychaudhuri PIHC Proceedings of the Indian History Congress

POC Proceedings of the All-India Oriental Confe-

PPL Das Purāna Pañchalakshana, by W. Kırfel Preh Civ Prehistoric Civilisation of the Indus Valley, by

K. N. Dikshit. Die Hymnen des Rigveda, Vol. 1. Metrische Prolegomena. und text-geschichtliche Prolegomena, by H Oldenberg

QJMS Quarterly Journal of the Mythic Society. Ban-

galore Rec. Geol. Surv. Records of the Geological Survey of India. Ind.

Rivers. Rivers of India, by B. C Law Religion and Philosophy of the Veda and Upa-RPVU nishads, by A. B. Keith.

RV. Rigveda.

Sänkh Śr.S. Sankhayana Srauta-sūtra.

Satapatha Brahmana. Sat Br SAWM.

Sitzungsberichte der Bayerischen Akademie der Wissenschaften, München. Sitzungsberichte der Berliner Akademie der SBA.

Wissenschaften. Sacred Books of the East, Oxford. SBE.

Science and Culture, Calcutta. SC

The Script of Harappa and Mohenjo-daro, by Sript

SD.

G. R. Hunter.
Sanskrit Drama, by A. B. Keith.
Sitzungsberichte der Preussischen Akademie SPAW. der Wissenschaften,

Srauta-sūtra. ŚS. Sāmaveda. SV.

Svetāśvatara Upanishad. Śve. Taittiriya Upanishad. Taitt. Taitt Br. Taittirīya Brāhmana.

Taitt Sam Taittiriya Samhitä. Tribes Tribes in Ancient India, by B C. Law.

Vasishtha Dharma-sütra. Vas Dh S Ved Ind Vedic Index, by A. A. Macdonell and A. B.

Keith. Ved. Myth. Vedische Mythologie, by A. Hillebrandt. Vedische Studien, by R. Pischel and K F Ved Stud-

Geldner Vedic Mythology, by A. A. Macdonell VM WZKM Wiener Zeitschrift für die Kunde des Morgen-

landes vv Yajurveda

ZDMG Zeitschrift der Deutschen Morgenlandische Gesellschaft, Leipzig.

zIIZeitschrift für Indologie und Iranistik, Leipzig.

BOOK ONE INTRODUCTION

CHAPTER I

INDIAN HISTORY—ITS NATURE, SCOPE AND METHOD

History has been defined as "the study of man's dealings with other men, and the adjustment of working relations between human groups." The beginnings of the history of India, therefore, go back to that remote period when man first settled in this country. We need not discuss whether he migrated from outside or emerged here by a process of evolution from his animal ancestors. But in any case the earliest man has left little evidence to enable us to investigate his thoughts, desires, activities or achievements. We can only dimly discern his gradual growth as a sentient being amid the geological changes and physical and biological environment in which he found himself. To begin with, he was essentially a part of the plant and animal life that surrounded him, reacting passively to the climate and geographical configuration of the land. But he slowly gained consciousness of those powers and potentialities which distinguished him from other animals and enabled him to dominate over nature rather than remain its slave.

The greater part of this process of evolution, which must have one very slender evidence. The study of this fascinating subject has made some progress in Europe, while so far as India is concerned, it is still in its infancy. But the little that is known shows that the prehistoric period in India presents features very similar to what we meet with in Western Asia and Europe. Here, as elsewhere, "man's prehistory merges in the pageant of the animal world," and is largely determined by his natural surroundings.

This volume, therefore, begins with a short account of the geo logical, geographical, and biological background of primitive man. This setting of the stage is followed by a study of the peoples who played their part therein. In the absence of any written record, the little that we know of their history and culture is based on archaeological finds, such as tools and implements made of stone, bone or metal, potsherds, rude paintings and skeletal remains—exactly the same type of evidence on which the prehistoric study of other countries is based.

As we proceed with our narrative we gradually realize that the different phases of Indian history present a striking parallel to those of other countries which can boast of a culture and civilization going back to remote antiquity. The stone implements and other remains of the palaeolithic and neolithic periods prove that human civilization began here in the same way, if not at the same time, as in other

parts of the world. The development of this civilization through the copper and iron ages, presents features which, though not identical, yet offer sufficient similarity in detail with what we know of many other countries. The discoveries in the Indius Valley and adjacent regions have further emphasized the close association between the cultures of India and those of Western Asia, and thereby link up Indian history with that of the most ancient period of the world known to us.

India now takes her place, side by side with Egypt and Mesopotamia, as a country where we can trace the dawn of human civilization and the beginnings of those thoughts, ideas, activities and movements which have shaped the destines of mankind all over the civilized world. The history of India thus possesses an aspect of universality which so strikingly distinguishes the history of Egypt, Babyloma, and Assyria in the eatily, and Persia, Greece, and Rome in a somewhat later age in the case of each of these the universal aspect far transcends in importance the individual or regional aspect. This is not, however, the case with India. This difference has modified the outlook and treatment of the history of India and made it a problem almost sui generis.

The chief difference between India and the other ancient countries mentioned above lies in the continuity of her history and civilization. The culture and civilization of Egypt, Sumer, Akkad, Babylon, Assyria, and Persia have long ceased to exist. They are now mere past memories and their history possesses only an academic interest Indian history and institutions, however, form an unbroken chain by which the past is indissolubly linked up with the present. The modern peoples of Egypt and Mesopotamia have no bond whatsoever with the civilization that flourished there millennia ago and its memorials have no more (usually very very much less) meaning to them than to any enlightened man in any part of the world.

But not so in India The icons discovered at Mohenjo-daro are those of gods and goddesses who are still worshipped in India, and Hindus from the Himalaya to Cape Comorin repeat even today the Vedic hymns which were uttered on the banks of the India nearly four thousand years ago. This continuity in language and literature, and in religious and social usages, is more prominent in India than even in Greece and Italy, where we can trace the same continuity in history. The social and religious ideas of ancient Greece and Rome and their philosophy and outlook on life, in short, some of the most essential factors which give individuality to a nation and preserve its continuity, are almost foreign to the peoples now inhabiting those lands. An artificial continuity is no doubt maintained in these two countries, and the link with the past is not altogether snapped, as in the cases of Egypt and Mesopotamia. Nevertheless, the difference can only be regarded as one of degree and not of kind; and neither

INDIAN HISTORY, ITS NATURE, SCOPE AND METHOD

Greece nor Italy offers a parallel to India, in respect of either antiquity or continuity of civilization.

To this difference may be added the present position of India. Her political subjection and lack of material power have relegated her to a position of marked inferiority in the eyes of the world. Both these causes have affected the study of the history of India in more ways than one. It has not been easy, for instance, to bring a detached scientific spirit to bear on the study of the history of India. This spirit, which so conspicuously distinguishes European writers of the history of Egypt and ancient countries in Western Asia, is not seldom lamentably absent while they deal with the history of India. The reason is not far to seek, and may be traced to a psychological instinct or political prejudice. The India of today has cast its shadow on the past, and few writers have been able to disentangle the two and view each of them in its true perspective. The political history or India, even of ancient times, has been almost invariably viewed through the spectacles of the eighteenth and nineteenth centuries V. A Smith, the well-known historian of ancient India and a distinguished member of the Indian Civil Service, never concealed his anxiety to prove the beneficence of the British Raj by holding before his readers the picture of anarchy and confusion which, in his view, has been the normal condition in India with rare intervals. To him. as to many others before and after him, ancient Indian history after the death of Harsha-vardhana was merely a pathetic tale of political chaos and internecine struggles, pointing to the inevitable moral: "such was India and such it always has been till the British established a stable order."

Sometimes the pendulum swings to the opposite extreme, and Indian writers seek to find in ancient India a replica of the most advanced political institutions of the West. From isolated phrases of doubtful import they conjure up a picture of a full-fiedged modern democracy and even of an up-to-date parlamentary form of government. This is a counterblast, from the Indian side, to the inveterate belief of European writers in undiluted autocracy as the only form of government that ever prevailed in India. To them "Oriental despotism" is an article of faith that colours their whole outlook. Some have also inherited the classical idea that wisdom and enlightenment were always a sort of monopoly of the West, and the East, comparatively as backward as she is today, must have acquired all the elements of higher culture from the West.

The squalid poverty of modern India colours the outlook on commic conditions in ancient and mediaeval times. Even enlightened historians find it difficult to accept the view that Indians built ships and navigated the seas, for no better reason than that modern Indians show such an aversion from, and ineptitude for, maritime activities. Such instances may be multiplied to almost any extent.

There are no doubt exceptions, but one cannot deny, or overlook, the broad fact that Indian history has suffered much from an instinct to read the present into the past.

The opposite danger of reading the past into the present has been no less a potential factor in distorting the history of India. To many the most glaring imperfections and even the most degrading features of modern Indian social life are sanctified by antiquity. They have a tendency to judge everything they see before them, not by its present form and effect, but by a reference to what they conceive to be its original character, and the part it is supposed to have played in building up an ideal society in the past. This almost necessarily leads to the artificial creation of a golden age which rests mainly on imagination and intuition, independent of historical evidence. This intellectual support of false doctrines and bad institutions in the name of India's past often proceeds from a perverted form of patriotic sentiments or an inborn sense of national pride. In either case it is a wrong interpretation of Indian history, and what is worse, such interpretation is often devised as an instrument for consecrating all deep-seated prejudices.

The student of Indian history must avoid these pitfalls and follow the modern method of scientific research. Our aim should be the discovery of the truth, and nothing but the truth, and in order to attain this goal we must apply our minds fearlessly and without prejudice and preconceptions to the study of all available evidence. We should properly sift these data by all rational methods, handle them in the spirit of a judge rather than an advocate, and formulate our conclusions only as far as they permit us to do so We may not achieve definite results in many cases, and final and decisive conclusions would probably be few and far between. But it is better to plead ignorance, express doubts and put forward alternative possibilities rather than definitely uphold a view on meagre and insufficient grounds We must be particularly on our guard where any such view is likely to evoke strong sentiments and passions or affect the interest of any class or community The history of India's past touches the present life of India on many points, and we may legitimately expect the one to guide and control the other. This makes it all the more difficult, especially for an Indian writer, to take a detached view of the history of India and approach it in a purely scientific attitude Nevertheless the difficulty, great as it is, must be overcome, and a proper critical spirit should be cultivated, if we are to read aright the story of India's past and correctly understand its implications for the future

We have so far dealt with the peculiar difficulties that confront us in the study of Indian history in view of its continuity. Another obstacle, also of a somewhat special character, arises from the nature of the evidence on which the study must necessarily be based. The

INDIAN HISTORY, ITS NATURE, SCOPE AND METHOD

different classes of evidence and their nature, scope and value will be discussed in detail in the next chapter. But some general points must be noted here in order to indicate both the limitations and the specific directions of our study.

The first thing to remember is that for the longest period of Indian history, viz., from the earliest time down to the Muslim conquest in the thirteenth century A.D., a period of about four thousand years, we possess no historical text of any kind, much less such a detailed narrative as we possess in the case of Greece. Rome, and China. The history of ancient India resembles, therefore, that of ancient Egypt and Mesopotamia. In all these cases it has only been possible to reconstruct the skeleton with the help of archaeological evidence discovered in comparatively recent times. This history differs radically from what we normally understand by the word. It is mostly a string of names and incidents, often with wide gaps, and almost always without that fullness of detail which enables us to trace the causes and consequences of specific events, examine the various forces at work in their true perspective, mark the general tendencies of the epoch, explain the inner causes of the rise and fall of kingdoms and empires, or the progress and decay of races and nations, and determine the exact relation between the different elements of the body politic or the different aspects of life and society. These and many other features which make history a social science in the real sense of the term are lacking in the history of ancient India, more or less to the same extent as in that of other ancient civilizations that flourished in Egypt or Western Asia.

But there is one very important difference. Ancient India has bequeathed to us a vast treasury of texts which represent the intellectual and literary activities of more than two thousand years and cover a wide field. The earliest literary work, the Samhitā of the Rigveda, is at least three thousand years old and may be even considerably older. A continuous stream of literature flowing since that remote age, widening in course of centuries, and embracing almost all fields of human endeavour excepting political activity, throws a light on the civilization of India such as we do not meet with in cases of other ancient cultures. This mass of literature deals with philosophy and religion, including ethics, ritual, and ceremonial; cosmogony, cosmology, geography, astronomy, and the allied sciences; political and economic doctrines and practices; and, in a minor way, with almost all branches of secular life. It includes, besides a mass of religious texts, purely literary works such as epics, lyrics, Kāvyas (poems), dramas and prose romances, as well as biographies and folk tales. This literature is as bulky in volume as it is varied in its contents. Although it does not help us very much in reconstructing the political history of ancient India, it throws a flood of light on, and enables us to trace the various stages in the development of, culture

and civilization in ancient India, such as is not possible in the case of ancient Egypt, Western Asia and China, and even Greece and Rome.

This fact must be borne in mind in any approach to the study of ancient Indian history. We should not expect any critical and detailed narrative of the political events, or a proper estimate of the life and character of great historical personages of whom we catch but fleeting glimpses in the moving panorama of the history of two thousand years that passes before our eyes in a haze of mist or gloom. The galaxy of kings, generals, and statesmen which crowd for instance, the canvas of the history of Greece and Rome, the moving stories of their lives and activities, the surging mass of internal and external forces that shape the destiny of the state and set it going, sometimes in slow evolution and sometimes in revolutionary ardour. and the ebb and tide of national glory from age to age with its intense human appeal and great lessons for posterity-all these and many other factors which form the spell of the history of Greece and Rome do not constitute the main force or the chief interest of ancient Indian history. That these elements were not lacking in the evolution of Indian history is proved by the occasional glimpses of great men and great events, of the same genre But these are mostly shadows, without that glow and colour which endow them with life and spirit Hence the picture is dull and lifeless and, being devoid of general interest, makes no passionate appeal to human mind.

But though admittedly deficient in this respect. Indian history is abundantly rich in its delineation of the progress of the human mind and society from its earliest infancy to a comparatively mature state Other civilizations must have passed through the same or similar stages, but we lack the means to trace them in such fullness of details in no other case, for example, can we go back to the dim beginnings of those intellectual and moral ideas which appear to us in full maturity in the shape of a set form of religion, theology, and obliosophy Thanks to the vast mass of Indian literature, we can not only do this but follow, in a general way, the long and tortuous ways which human civilization, at least in a large part of the world, has had to pursue in its weary and tedious onward march for thousands of veers. This constitutes a claim for universal interest which should not be less than the inspired by the political history of Greece and Rome

The genius of each considerable group of humanity is perhaps adapted more to one kind of end than to another. It has been argued that the Indians had a bent of mind which looked more to the inner self than the outer body, to matters spiritual rather than the material world. In the absence of a fuller knowledge of the political history or secular life of ancient India, it is difficult to set the final seal of approval to this view, although it is very generally held. But so far as available evidence goes there cannot be the slightest doubt that Indian civilization manifests itself in a way and a form very different from

INDIAN HISTORY, ITS NATURE, SCOPE AND METHOD

that with which we are familiar in the rest of the world. We have consequently to approach the history of India in a different spirit, and adopt a different scale of values in order to appraise her culture and civilization. The wars and conquests, the rise and fall of empires and nations, and the development of political ideas and institutions should not be regarded as the principal object of our study, and must be relegated to a position of secondary importance. On the other hand, more stress should be laid upon philosophy, religion, art, and letters, the development of social and moral ideas, and the general progress of those humanitarian ideals and institutions which form the distinctive feature of the spiritual life of India and her greatest contribution to the civilization of the world

Nevertheless, the political history of each period, as far as it is known to us, must be the starting point of our study, as it forms the backbone of history. Its function may be compared to that of the skeleton in a human body which gives shape and distinctness to the mass of flesh and skin and marks it with the stamp of individuality.

The greatest handicap in the treatment of the history of ancient India, both political and cultural, is the absence of a definite chronology The dates of political events and of the vast mass of literature which forms the basis of cultural study are but imperfectly known, and the farther back we recede, even a close approximation of these dates becomes more and more difficult and uncertain. This gives scope for endless discussions and wide differences of opinion. We experience a similar difficulty in the interpretation of data, as they are often vague and meagre. It is not always possible, and in many cases neither desirable nor profitable, in a general comprehensive history of India, to review the different standpoints, and the historian is often obliged to adopt one particular view, as against others, with or sometimes even without brief reference to them For minute discussions of the merits of conflicting views the reader must be referred to special treatises or articles in journals Great care should, however, always be taken to distinguish clearly the known from the unknown, and the doubtful from the certain, and to indicate, as far as possible, the range of our ignorance and uncertainty. Ignorance may not be bliss in historical studies, but it is certainly folly to be wise where wisdom is based on imperfect knowledge and serves merely as a cloak for dogmatism As the following pages will show, the path of the historian is beset with difficulties, doubts, and uncertainties; he has often to advance laboriously through dubious tracks and not seldom loses. them altogether. His task frequently resolves itself into weighing one set of doubtful evidence against another in order to arrive at what appears to him to be the most reasonable conclusion. More often than not, such theories are all that he can offer. The historian, no less than his readers, must clearly recognize the provisional nature

of these hypotheses and be ready to see them modified or upset and replaced by others with the discovery of fresh data. They are slender but necessary foundations on which the history of India has been built up in the past and has to be built in future.

The observations hitherto made apply more particularly to the ancient period of Indian history. With the beginning of the next period the situation is considerably improved by the existence of a series of chronicles, dealing with the history of India from the foundation of the political power by foreign Muslim invaders up to the eighteenth century A.D. These chronicles include detailed narratives of contemporary events as well as compilations of past history from older sources now lost to us They cannot be regarded as an absolutely authentic account or impartial review of historical events, but supply ample data for the reconstruction of the history of the period Both in scope and value they are comparable to the chronicles and historical treatises in Europe of the same period. Unfortunately these historical texts concern themselves primarily with the events and fortunes of the principal Muslim ruling dynasties, and dwell only very incidentally on the history of the smaller states, specially the Hindu kingdoms Nor, with a few exceptions, do they throw much light on the life of the people at large outside the royal courts Although, therefore, there is a great advance in our historical knowledge over the earlier period, and in some cases we have got a pretty good historical account, it is, generally speaking, neither as definite nor as full as our modern historical sense would demand in spite of the valuable additional help that the historian gets from other sources such as the archaeological evidence, official documents, contemporary literature, accounts of foreign travellers, etc Nevertheless it would be unjust to deny that from about 1200 A.D. India possesses a written history which would not suffer very much in comparison with the history of contemporary Europe, and might differ from it in degree, but not in kind. It is a fairly good and detailed history, but of kings and states, not of the country and the people.

The thirteenth century A.D may be regarded as a broad dividing line in Indian history in more than one sense. The sovereign power passed into the hands of foreigners who belonged to allier races and professed a new religion of somewhat militant type. The establishment, for the first time, of two diverse systems of culture and civilization led to a definite cleavage between the rulers and the ruled such as India had never known before. Indian history gains in content and becomes richer in detail, but loses unity of treatment. The stories of the ruling powers grow in volume, but we know little of the lot of the ruled who formed the vast mass of the people.

The first three or four centuries of Muslim rule in India form

INDIAN HISTORY, ITS NATURE, SCOPE AND METHOD

a very important period of transition. The foreign rulers and the new religion with its exotic culture took a long time to take root in the soil. But we have little reliable knowledge of the struggle for independence and the steps by which the resistance of the people was broken down. Of the early reaction of Hindiusm towards Islam, and the process by which the latter gradually made headway in this land of conservatism and orthodoxy, we know even less. The Muslim chroniclers, our sole source of information, generally speaking, record only a series of cheap military victories over the rebellious or recalcitrant infidels, and these are looked down upon as merely hewers of wood and drawers of water whose life and fortunes are hardly of any consequence to them. They would have us believe that the triumphant banner of Islam merrily floated from one end of the land to the other, and nothing else counted in the country.

But this is merely one side of the picture, and that of the loon painted by himself. We know that there was always a Hindu India, side by side with Muslim India, and it again asserted itself, both in politics and culture, in the fullness of time. It was not dead, but lay dormant in the early centuries of the foreign rule. The history of the Hindus, except in South India and Rājputāna, during this period is, however, almost a blank page. The scanty remains of their literature throw some faint light on the social and religious changes that came over them, but the little that we know merely casts into greater relief the devih of our ignorance.

Light dawns agam in the sixteenth century. The establishment of the Mughal power ushers in a new period of Indian history in which our knowledge of India as a whole is much fuller, and we begin to see things in their true perspective. The vision of a new India, built upon the only stable foundation of the love and confidence of the ruled and the fusion of the two great cultures, now emerges in clear light. History, though it still continues mainly to be the court history of the Muslim rulers, begins to visualize India as a whole, and takes note of Hindu India. The rosy dream of a politically united India, on a common cultural basis, is soon shatered, but Hindu India comes to stay and the historian no longer loses sight of it. The balance is restored and the unity of Indian history is securely established. In spite of many vicissitudes, we can trace the fortunes of India as a whole through the pages of history. This unity of treatment is never lost in later times.

It is not necessary to dwell at length upon the modern history of India Strictly speaking, it offers no peculiarities, in respect of sources of information or method of treatment, save and except the restrictions imposed by political considerations. The archives of the British Government are gradually being thrown upen, and the Indian states also have recently adopted a more liberal policy

in this respect. Contemporary historical documents are ample, though they have not yet been worked out as fully or as independently as one could have desired.

It will be hardly any exaggeration to say that Indian history, in a comprehensive sense, has so far been neither written nor even conceived in a proper spirit A clear grasp of the subject is generally lacking. An attempt has been made above to analyse the different factors that account for this lamentable state of things. We have also tried to indicate the true spirit in which the study of Indian history should be approached, the inherent defects and shortcomings imposed by lack of materials, and the likely dangers and pitfalls which the historian should avoid.

The observations made above would also convey some idea of what the "History of India" means to its readers, what they might legitimately look for, and what they are likely to miss; the proper value they should attach to different aspects, and the profit they may derive from them; the resemblances as well as the differences which it offers to the history of other countries; and lastly, the extent to which the interest of the subject is confined to the particular region and people of whom it treats or concerns a wider range of humanity

CHAPTER II

SOURCES OF INDIAN HISTORY

It will be abundantly clear from what has been said in the previous chapter that the sources of Indian history differ considerably in its different periods. Broadly speaking, we may distinguish three such periods, viz.: (1) from the most ancient times to the end of the twelfth century A.D., (2) from the thriteenth to the eighteenth century; and (3) the subsequent period. It will be convenient, therefore, to treat these three periods separately.

1 THE ANCIENT PERIOD

A. Literary Sources

The absence of any regular historical chronicle is the leading feature of this period. When we consider the vast mass of contemporary literature and its extremely wide range, the almost utter lack of historical texts certainly appears as a somewhat strange phenomenon. Some people are, therefore, inclined to believe that such literature did exist, and explain its absence by a theory of wholesale destruction It must be regarded, however, as extremely singular that the agencies of destruction should have singled out this particular branch of literature as their special target. But the strongest argument against the supposed existence of regular historical literature is the absence of any reference to historical texts We have, therefore to admit that the literary genius of India, so fertile and active in almost all conceivable branches of study, was not applied to chronicling the records of kings and the rise and fall of states and nations. It is difficult to give a rational explana tion of this deficiency but the fact admits of no doubt

The deficiency is all the more strange as there are indications that the ancient Indians did not lack in historical sense. This is proved by the carefully preserved lists of teachers in various Vedic texts, as well as in writings of the Buddhists. Jams and other religious sects That this spirit also extended to the political field is shown not only by the songs and poems in praise of kings and heroes referred to in Vedic literature, but also by the practice of rectifing eulogies of kings and royal families on ceremonal occasions. Even so late as the seventh century A.D. Hiuen Tsang noticed that each province in India had its own official for maintaining written records in which were mentioned good and evil events, with calamities and fortunate occurrences. That this practice continued for centuries after Hiuen Tsang is proved by a large number of local chronicles and the preambles in old land-grants which

record the genealogies of royal families, sometimes for several generations.

We may thus presume that neither historical sense nor historical material was altogether wanting in ancient India. What was lacking was either the enthusiasm or the ability to weave the scattered raw materials into a critical historical text with a proper literary setting which the people would not willingly let die. In other words, in spite of great intellectual and literary activity, India did not produce a Herodotus or Thucydides, not even a Lavy or Tacitus It has been argued that this was partly due to the peculiar temperament of the people who, to use the words of Hiuen Tsang, "made light of the things of the present world" But this explanation can be hardly regarded as satisfactory when we remember the great progress of the Indians in various branches of secular literature, including law, political science, and the art of administration

Whatever may be the reason, the fact remains that the only concrete result of historical study in the most ancient period is to be found in long lists of kings preserved in the Purānas and the epics These lists profess to trace the unbroken royal lines from the first human king that ruled down to about the third or fourth century A D The earlier part of them is obviously mythical, and the last part is undoubtedly historical; but it is a moot point to decide where the myth ends and reliable tradition begins.

It is interesting to trace the gradual changes in the views of scholars regarding the historical value of these traditional royal lists preserved in the Puranas and epics. At first they were rejected wholesale without much ceremony Later, the accounts of the dynasties ruling in the sixth century B.C. and later were accepted as fairly reliable, as they were partially corroborated by the Buddhist literature and archaeological evidence. Next, the preceding dynasties going back to the time of the Great War described in the Mahabharata, which event is approximately placed in round numbers between 1500 and 1000 B.C., were also regarded by some scholars as furnishing a secure basis for history, though they were loath to accept as correct all the details about names and dates. So far as the account of the royal dynasties before the Great War is concerned, Pargiter was the first to make a bold attempt to coordinate the varying details into a skeleton of political history, and others have since followed in his footsteps. The difficulty of the task is increased by the strongly marked differences in the various traditions, and the conclusions reached by the few scholars who have so far worked in this field show great divergences. The attempt to reconstruct the skeleton of political history before the Great War cannot, therefore, be regarded as yet leading to any satisfactory result. For the period following that (1000-600 B.C.)

we have at least a working hypothesis, and it is not till we come to the beginning of the sixth century B C. that we can firmly grasp the thread of the dynastic history of Northern India.

The traditions preserved in ancient Indian literature, notably the Purāṇas, thus form the main source of information for the history of the earliest period, and for the period before the sixth century B.C. they constitute our only source. The Buddhist and Jain literatures of the succeeding period form a valuable supplement and corrective to the evidence of the Purāṇas, and isolated references in other literary works, even grammatical texts, have proved to be very important historical data.

For the later period, beginning with the Guptas, we have no texts like the Purahas, giving even bare dynastic lists. But although Indian literature practically ignores the history of the long period of one thousand years that follow, it does not altogether cease to be of help. Apart from isolated references scattered in the vast mass of literature of all types, we have two classes of works that contribute directly to our knowledge of history, viz. biographies and local chronicles.

It is fortunate that certain writers took the lives of their royal patrons as the theme of their literary works. Bāṇabhaṭṭa, that great master of Sanskrit prose, wrote the Harsha-charita (life of the emperor Harsha), and two poets, Vākpati and Bilhaṇa, described the exploits of Yaśovarman and Vikramāditya (of the later Chālukya dynasty) in two epics, the Gauḍapāho and the Vikramādka-deva charitā. We have also a curious poetical work, the Rāma-charitā, in which the author uses throughout verses of double entendre, which, taken one way, describe the story of the Rāmāguṇa, and taken the other way, recount the story of king Rāmapāla of Bengal.

Among other biographical works may be mentioned the Kumārapāla-charita of Jayasinha, Kumārapāla-charita or Dvyāśrayakāvya of Hemachandra, Hammīrā-kāvya of Nayachandra, Navasāhasāṅka-charita of Padmagupta, Bhojaprabandha by Ballāla, Prithvirāja-charita of Chand Bardai and Prithvirāja-vijaya (fragmentary) by an anonymous writer.

These and other works of the same class cannot be regarded as much history, although they contain valuable historical information. Their object was the glorification of the king rather than to give a true picture of his life and times, and they were mostly conceived by their authors not as historical texts, but primarily as mediums for showing their literary skill and ingenuity

Among the local chronicles, the most famous is the Rājataraāqini, it is a history of Kāshmir, written throughout in verse, by Kalhana in A.D. 1149-50. This is the only work in ancient Indian literature that may be regarded as an historical text in the true seuse of the word. The author has not only taken great pains to collect his

material from the existing chronicles and other sources but, at the beginning of his work, he has laid down a few general principles for writing history which are remarkable as being far in advance of his age. Indeed they may be regarded as anticipating, to a large extent, the critical method of historical research which was not fully developed till the nineteenth century A.D. In view of the lamentable paucity of historical talent in ancient India, it is worth while quoting a few of Kalhapa's observations, showing the high level which the Indian intellect had attained even in this much neglected sphere of activity. Regarding the strict impartiality to be observed by an historican Kalhana remarks:

"That virtuous poet alone is worthy of praise who, tree from love or hatred, ever restricts his language to the exposition of facts" (1, 7).

As to the method of collecting data we may quote the following verses among others (1. 14, 15)

"I have examined eleven works of former scholars which contain the chronicles of the kings, as well as the views of the sage Nila (Nilapurāna).

"By the inspection of ordinances (śāsana) of former kings relating to religious foundations and grants, laudatory inscriptions (prasasti-pația) as well as written records (śāstra), all wearisome error has been set at rest."

In spite of his excellent equipment and high ideals, Kalhana was unable to reconstruct the early history of Kashmir, for his enthusiasm and industry could not make up for the lack of authentic material His account of the period before the seventh century A D cannot be regarded as trustworthy, and it becomes more and more unreliable as we go back to more ancient periods Nevertheless his attempt was creditable, and it is refreshing to find that he alone, of all Indian writers, has preserved some accounts of such forgotten Indian rulers as Kanishka From the seventh century A.D., however, the Rajatarangini may be regarded as a reliable history of Kashmir. The author narrates the career of each king in chronological order with a fair amount of detail, showing scrupulous impartiality in his criticism of men and events, and exhibiting soundness of judgment and healthy liberality in his general ex pression of views As he gradually comes nearer his own age the history becomes fuller and more and more replete with interesting accounts of men and things It ceases to be merely a chronicle of dry details and faithfully presents the ebb and flow of national life, the periods of glory and misery, and the greatness and weak-

ness of men and rulers—in short all those minute details which make history a record of intense human interest, faithfully portraying the march of events through which a people works out its own destiny. We close the book with a poignant regret that we do not possess such a history for the whole of India, or many more texts of the same kind dealing with other parts of the country.

Kalhaṇa's example was not lost upon his countrymen and several writers of Kāshmir continued his chronicle. Jonarāja, who died in A.D. 1459, imitated Kalhaṇa's style and brought the historical narrative up to the reign of Zain-ul-Abidin. The Jaina-Rājatarāigṇā by his pupil Sirāvara covers the period A.D. 1459-86 Then came Prājya Bhaṭṭa and his pupil Siuka who carried on the history till a few years after the conquest of Kāshmir by Akbar These later works are, however, much inferior to the Rājatarang.ṇi both in literary style and in historical accuracy.

Next to Kāshmir, reference may be made to a large number of chronicles of Gujarāt These include well-known works like R·s-Mālā, Kīrtikaumudī of Somešvara, Sukṛita-sēmkirtana oi Arisimha, Prabandha-Chintāmani by Merutniga, Prabandha-koša by Rājašekhara, Hēmmīra-māda-mardana and Vastupāla-Prabapāla-pra-šast of Jayasımha, Sukṛtakārti-kallolimā of Udayaprabha, Vasanta-vilāsa of Bālachandra, etc., which are treasure-houses of stories and fables as well as historical anecdotes. The two biographies of Kumārapāla, referred to above, and these chronicles enable us to trace the history of Gujarāt, specially under the Chaulukyas, with fullness of details such as is not possible in the case of any other kinrdom in ancient India except Kāshmir.

There were probably local chronicles of Sind which formed the basis of an Arabic history of which we possess a Persian translation, the Chachnāma, composed at the beginning of the thirteenth century A.D. It gives a detailed account of the Arab conquest of Sind and briefly refers to its history during the previous century

We have also local chronicles of Nepal, which merely contain a tist of kings and the duration of their regins, with only a few details here and there. The earlier portion of these Vanházaia—as they are called—is purely mythical, but there seems to be an historical basis for the accounts relating to the period commencing from the first century A.D. The list is not, however, carefully compiled There are wide divergences between the different chronicles, and many details are proved to be wrong by epigraphic evidence. These chronicles were never worked into historical texts by a genius of the type of Kalhana, and although in the absence of other sources they supply the framework for the history of Nepal, they cannot be regarded as a satisfactory substitute for real and genuine history.

The existence of historical chronicles in Kāshmir, Guiarāt, Sind, and Nepāl supports the presumption that the archives of different

states, as a rule, contained such royal chronicles, as stated by Hiuen Tsang. These chronicles, unless raised to the status of a literary work of the type of Rājataratjārjā, or included in pretentious or sacred works like the Purāṇas, are not likely to long survive the fortunes of the dynasty whose history they recorded. This probably accounts for their general destruction, though a few have been preserved in outlying places, like Kāshmir, Gujarāt, Nepāl, and Assam (in a later period).

B. Archaeologu

If we had to depend on literary sources alone we would have known very little indeed of the history of India for the thousand years that elapsed since the fall of the Andhras in the third century A.D. Our knowledge of this period would have been even much less than that of the thousand years preceding it. Fortunately the gap has been filled by the actual remans of this ancient period in the shape of coins, inscriptions, and monuments They have enabled us to reconstruct an outline of the history of the period which, vague and imperfect though it is, forms the only sure foundation on which the history of India will have to be built up in future

Indian archaeology is a science of recent growth, and is barely a century old. Its pioneers were a few enterprising European scholars who took a deep interest in the antiquities of India and made an earnest effort to unravel her past. The origin and progress of this fascinating labour of love, which culminated in organized departments of research and exploration, achieving wonderful results, has been reviewed in the next chapter. Here we may merely tabulate these results by way of indicating their bearing on the history of India

I Inscriptions—Inscriptions have proved a source of the highest value for the reconstruction of the political history of ancient India. Being engraved on stone and metal they are free from the process of tampering to which books or other documents written on perishable materials are liable Their value as contemporary documents thus remains unimpeachable. Although not always dated, the character of the script enables us to determine their approximate age. Thus as historical evidence they take precedence over the mass of literature, as the age of most of the texts is uncertain and they all must have undergone considerable modifications in the course of being preserved in copies through hundreds of years.

Apart from these considerations, the nature of many of these inscriptions invests them with a high degree of historical importance. The series of Indian inscriptions opens with the memorable edicts of the great Maurya Emperor Asoka, engraved on rocks and pillars

throughout his vast empire, from beyond the Indus in the west to the Mysore plateau in the south. These are royal proclamations and commandments, mostly in his own words, and convey across twenty-two centuries the life and personality of a great man and a great ruler with a striking vividness to which there is hardly any parallel in the history of the world. It is either the strangest freak of nature or the rare good fortune of India, if not a divine dispensation, that in the midst of an almost wholesale destruction of historical materials of the period, one fragment alone should have been spared, so faithfully reflecting that spiritual greatness which constitutes the glory of Indian civilization and its special characteristic. The records of Asoka form a class by themselves, and contribute largely to our knowledge of the history of the period and the spirit that animated one of the greatest men that ever sat on a royal throne. No other inscriptions make even a near approach to them in point of interest or historical importance.

One form of alphabet is used in all these records, excepting two groups in the north-west, which are written in an altogether different script. The latter, known as Kharoshthi, was obviously derived from Aramaic and, like the Semitic alphabet, was written from right to left. It continued in use in the north-western corner of India for many centuries, but vanished without leaving any trace behind.

The script in which all the other inscriptions of Aśoka were written is known as Brahmi, and is written from left to right. It is the earliest form of Indian writing known to us, and from it have been derived, by slow evolution through ages, all the Indian characters current today, including Tamil, Telugu, and Kanarese. When the records of Asoka first came to notice towards the close of the eighteenth century, their script was as much an enigma to all as in the fourteenth century A.D., when the Emperor Firuz Tughluk brought a pillar with Aśoka's inscription to Delhi, and made a vain attempt to have it read by the Indian Pundits. The deciphering of the Asokan inscriptions by Prinsep (described in detail in the next chapter) is one of the romances of archaeology comparable to those associated with the discovery of the clue to the hieroglyphics and cuneiform writings. It was accomplished in A.D. 1837. and in course of the next fifty years Indian epigraphy was placed on a firm footing. By the devoted and patient labour of a number of scholars the different types of Indian scripts were thoroughly studied. analysed, and classified, and a scientific basis laid down for Indian palaeography, which has made it possible to corelate them to different ages and localities. Apart from their intrinsic interest as historical records, the Asokan inscriptions have thus proved of great value as the starting-point of epigraphic and palaeographic studies in India.

The inscriptions of the post-Asokan period may be broadly

divided into two classes, official and private. The official records are in most cases either prasastis, i.e. eulogies of kings written by their court-poets, or land-grants. The most famous example of the former is furnished by the long record of Samudra-gupta engraved on an Aśokan pillar, now in the Allähäbäd fort. It describes in great detail the personal qualities and the military achievements of the great Gupta emperor and forms the chief document of his memorable reign. The age of the Imperial Guptas is now justly regarded as the Golden Age of India. But all memories of it, and even the very name of Samudra-gupta-the Indian Napoleon-who laid the foundations of the Gupta empire, were lost to Indian tradition. The Allahabad prasasti has preserved from oblivion the name and fame of this great hero and, along with a number of other inscriptions, forms the main basis of our knowledge of the Gupta period. The Gwalior prasasti of Bhoja has similarly thrown a flood of light on the imperial Pratiharas, another forgotten dynasty of ancient India.

Among other praisats, supplying valuable historical information, may be mentioned that of king Vijayasena of the Sena dynasty of Bengal engraved on a slab of stone found at Deopara Its nomnal object is to record the building of a temple by Vijayasena, but it is almost wholly devoted to a panegyric of the great king, recording his victories and achievements in the most high-flown language. The Aihole inscription of Pulakesiin II, the Châlukya king, belongs to exactly the same type.

By far the largest number of official documents are charters conveying the sale or gift of lands. These are mostly engraved on copper-plates, though in very rare instances they are also found on stone pillars and in temples. These charters define the boundaries of the lands and specify the object and conditions of the grant, often enumerating other interesting details such as the price of land, the mode of its measurement, exhortations to future kings not to confiscate the grants, and quotations from the scriptures threatening severe punishment after death for those who violate the grants in any way.

Interesting though these details are in many ways, they do not contain much that is of historical importance. But by a formal convention, fortunately followed in many if not n all cases, these charters begin with a sort of royal pradesti which gives a short account of the donor's family for several generations, and describes in greater detail the life and achievements of the ruling king. These formal and introductory portions in the land-grants have supplied us with invaluable historical material. Sometimes, as in the Chola inscriptions, this introductory part runs to a very great length, and forms a valuable historical document by itself. Very often this portion was wholly or partially stereotyped in the

royal archives and used in several grants. Sometimes the portion was independently engraved on copper-plates and these were kept ready in the office, so that when occasion arose, only the details of the grant had to be added to make them formal charters. In short, this historical part had little organic connection with the grant itself, and may be regarded as a wassist prefixed to it.

These prasasts were composed by court-poets or other royal officials, and one would naturally hesitate to take them at their face value. There is undoubtedly a great deal of exaggeration in the effusions of the poets. It is customary for them to endow their patron-kings with all the ideal virtues and to represent them as the rulers of the whole world girdled by the four oceans. Such general expressions must be discarded as of no historical value. But greater value attaches to the specific enumerations of campaigns, victories, and conquests; for these documents were public property, and their authors would be justly exposed to ridicule if they had made categorical statements without any basis whatsoever. Of course they were expected to exaggerate the achievements of their masters, but even such exaggeration implies a substratum of fact. A great deal of caution is therefore needed to assess the proper value of the claims made on behalf of a king. and they should be checked by all possible means. Such checks are furnished by the statements made on behalf of the rival kings, and sometimes welcome corroboration is afforded by independent evidence

In cases where the inscriptions are engraved on rocks or objects not easily portable, their find-spots become of great importance as indicating the territorial jurisdiction of the king. Sometimes the records of vassal chiefs and finds of coins corroborate the claims of territorial conquests. By these and other means it is almost always possible to make legitimate inferences from these documents about the achievements of the kings.

The official documents, however, form only a very small proportion of the inscriptions. By far the larger majority are private records. They cover a wide range, from a short votive inscription of two or three words to pompous poetical compositions gloritying an individual or family. They throw light on various aspects of society even where they do not directly contribute to political history. A good many are engraved on images of gods and religious buildings, recording plous donations. These constitute the chief means of fixing the dates of these images and buildings, and have been of incalculable help in tracing the evolution of art and religion, and determining their general condition in any specified period. Similarly the language and style of the inscriptions have been of immense value to the linguistic and literary history of India. The evidence of the inscriptions, taken in mass,

is unerring in these respects. If we analyse, for example, the 1500 or more inscriptions prior to the Gupta age that have so far come to light, we find an overwhelmingly large number—more than 95 per cent—written in Präkrit and concerned with non-Brahmanical religious sects, mainly Buddhist and Jain. The proportion is almost just the reverse in favour of the Sanskrit language and the Brahmanical religion, if we take the inscriptions of the period subsequent to the Gupta age. Even allowing for all accidental factors, this one fact betokens a sweeping change in the life of the people both in respect of the religious ideas and the medium of literary expression.

These inscriptions also throw important light on political history. Many of them refer to ruling kings otherwise unknown, and some of them even supply dates, either in regnal years or in a specified or unspecified era. This has been a prolific source of the constant addition to our historical knowledge, though where supplementary evidence is lacking we know little more than the royal name, his approximate date and the location of his kingdom. But even such scraps of information, pieced together, have enabled the historian to reconstruct a clear outline of the history of a locality or even of a definite period, of which little was known before.

In a few cases the private records throw more durect light on the political history of India, as they emanate from persons closely connected with a royal family. We have, for example, interesting records of families whose members for generations held high offices like ministers or generals. In others the importance of an individual is indicated by the office he held, or the part he played in the affairs of state. These inscriptions, though issued by or in honour of private individuals, therefore incidentally give us a great deal of information about the kings and political condition of the time.

On the whole it may be said without any hesitation that the prigraphic records of ancient India have been the principal source of our information regarding the political history, and have also proved to be of great value by supplementing literary evidence in regard to the social, religious, and economic condition of India.

2. Numismatics.—Next to the inscriptions, ceins are the most important source of the history of ancient India. Many thousands of these have come to light. Hoards have been unearthed in different parts of the country—a single hoard sometimes yielding many thousands—and individual specimens have constantly been found on or near the surface of ancient sites. Most of them at first passed into the hands of private individuals, but a number were recovered by scholars or acquired by public institutions. There is no doubt, however, that quite a large proportion was

melted or otherwise lost to antiquarian study, and this deplorable state of things is unfortunately still going on. A systematic study and collection of coins has been possible only in cases of regular archaeological excavations. Not only were many coins, otherwise acquired, lost to us, but no systematic record has been kept of the provenance of those which have survived. This has been a serious handicap to the scientific study of the coinage, as much of the historical importance of a coin is lost if we cannot determine the exact locality of which it formed the currency.

The importance of numismatics for the study of the economic condition of a country is too obvious to need a detailed consideration. Here we shall only indicate how coins have helped us to reconstruct the political history of the various periods.

The earliest coins of India bear only figures, devices, or symbols, but with few exceptions, no legends. These coins were sometimes cast in dies, but more often the symbols were punched on the metallic pieces. Sometimes there are many symbols, punched at different times. They were most probably deliberately stamped by the issuing authority, in order to guarantee their genuineness and value. These authorities might have been kings or states, but also certainly included individual merchants, tradeguilds, city-corporations, and similar bodies, for the idea of a state monopoly of minting coins was yet unknown. In the absence of legends, it is impossible to allot the different coins to these different categories. The meaning of the figures and symbols, once familiar to the people using these coins, is no longer clear to us. though some of them are familiar objects or well-known conventional designs. Various suggestions have been made regarding their significance, but they are highly speculative and rest on no secure foundations. Apart from conveying some vague religious ideas and artistic conventions these coins do not supply any historical information The rare legends on them refer to the mercantile corporations which issued them.

It is not till after the Greek invasion that we come across coins with the names of kings clearly engraved on them. Excepting, perhaps, a few coins of the time of Alexander, the most important series of such coins were those issued by the Greek rulers of Bactria who ultimately conquered the Punjab and North-Western Frontier. The artistic excellence of these coins has never been surpassed in India, and the portraits of kings and other figures on them show Hellenistic art at its best. These coins of the Graeco-Bactrians set a new fashion and may be said to have revolutionized Indian numismatics. The most important feature added to Indian coins from this time forward was the name, and sometimes even the portrait, of the sovereign who issued them. How greatly it has helped our knowledge of political history will be

apparent from the fact that it is from these coins alone that we know of nearly thirty Greek kings and queens who ruled in India. The classical writers have referred to only four or five of them, but not only were the names of the rest unknown to them, but even the very memory of the Greek domination over a corner of India for nearly two centuries was absolutely lost. This remarkable historical episode, interesting alike to Greece and India, came to the knowledge of the world, after nearly two thousand years, by the discovery of those fine series of coins—of gold, silver, and copper—which now adorn many public museums in Europe and India.

The coinage of the Greeks was imitated by the Scythian and Parthian invaders who followed in their footsteps, and although the execution of their coins is far inferior, they are equally important for historical purposes. Here, too, the coins alone have enabled us to reconstruct an outline of their history, and recover the names of quite a large number of their rulers. One branch of the Scythian invaders, who settled permanently in Gujarat and the Kathiawar Peninsula, issued coins which not only gave the name of the ruling king and that of his father, but very often also the date in the well-known Saka era This has enabled us to reconstruct the history of the Western Satraps-as these rulers are called-for a period of more than three hundred years With the exception of a few inscriptions and literary references, which otherwise would have been of little help, the coins have been the sole source of our information regarding the Greeks, the Sakas and the Parthians that entered India after the dissolution of the Mauryan Empire The Kushānas who followed them likewise issued a large number of coins, but the history of this dynasty is also known from other sources.

The coins have also been the principal source of our information regarding the various Indian states—both monarchical and republican—that flourished during the same period Most of them, like the Mālavas. Yaudhevas, the Mitra rulers of Pañchāla etc., are almost exclusively known from their coins In other cases, like the Sātuvāhanas of the Deccan, the Puranic account is corroborated. corrected, and supplemented by their coins and inscriptions.

The Guntas who founded the greatest empire in India after the Maurvas issued a large variety of fine coins Although we know a great deal of their history from epigraphic records, the coins form an important additional source of information

With the downfall of the Guptas the numismatic evidence ceases to be an important source of history. Isolated coins, here and there, have no doubt proved to be of great value, but they seldom afford us material information not otherwise available. It

is a curious fact that coins of even great emperors like Harsha or ruling dynasties like the Chālukyas, Rāshṭrakūṭas, Pratīhāras and Pālas, not to speak of lesser kings and dynasties, are either unknown or of little significance.

3. Monuments.—In addition to coins and inscriptions we have other antiquarian remains, such as buildings or parts thereof, statues of stone or metal, terra cotta, ornamental and decorative fragments, pottery, and various other objects of a miscellaneous character. They are of great importance in tracing the history and evolution of Indian art The art of a country is generally regarded to be a fair index of its culture, and it throws light on some higher aspects of its civilization which cannot be easily understood from other sources The remains of Indian monuments have thus considerably helped towards a proper appreciation of the life and spirit of ancient India

In addition to individual monuments, sometimes we have the vast remains of an ancient city laid bare before us. Some of them, like those of Mohenio-daro and Harappa have opened before us an altogether new type of civilization, reaching back to an age of which no memorials in India were known before. This has carried back the antiquity of Indian culture and civilization by several thousands of years and opened up a new vista of its history, character, and association with the outside world. It has also transformed our ideas of the origin of Indian civilization. We can no longer derive from the simple fact of the Aryan migration the complex structure of later Indian civilization, but must look for more than one source which fed the mighty stream. Even in concrete matters our ideas have undergone great changes. As an instance may be cited the origin of the Brāhmī script (used in the Aśokan records) which as noted above, is the parent-stock from which all Indian alphabets have been derived.

Scholars have almost unanimously held the view that Brāhmī was derived from a foreign source, though they widely differ about its identity. But more than five hundred seals have been discovered at Mohenjo-daro which contain a species of pictorial writing. This has not been deciphered yet, but the probability of the Brāhmī alphabet being derived from it is now being seriously considered. Similarly the deep-rooted conviction that Indian art originated from a foreign source not much earlier than the third century B.C., has been considerably shaken by the discovery at Mohenjo-daro of finely carved stone figures of the third millennium B.C. which would not unfavourably compare with the statues of the classical period in Athens. The archaeological excavation of the Indius valley is still at its infancy, and we may look forward to its continuation

as opening up a brilliant chapter of Indian history as yet unknown or even undreamt of.

Coming down to historical times, the systematic excavations of ancient sites like the city of Taxila or the monastic establishments at Sārnāth (near Benares) have thrown light upon various aspects of life of which there is little or no record in literature. Such excavations, as will be noted in the next chapter, have been few and far between. Still, meager though they are, compared with the vast extent of the country, these archaeological excavations have enabled us to realize some interesting aspects of Indian civilization which would have been otherwise unknown.

C. Foreign Accounts

In addition to literature and archaeological remains we have another interesting source of information in the accounts left by foreign writers. The earliest among them are the two Greek writers Herodotus and Ctesias, both of whom must have derived their information indirectly through Persian sources. Herodotus gives some useful information along with a great deal of fairy tales. but the account of Ctesias largely consists of incredible fables. Far greater interest attaches to the writings of those Greeks who accompanied Alexander to India, and the account of Megasthenes, who lived for some time in the court of Chandragupta Maurya as an ambassador of Seleucus. Though these works are mostly lost, much has been preserved in books, based upon them, written by later authors. These accounts contain a great deal of information that is both interesting and authentic, but they suffer from the defects inherent in the writings of foreigners, ignorant of the language and customs of the country. While great importance naturally attaches to what they recorded from personal observation, we must treat with great reserve their accounts based on others' reports or hearsay evidence Due allowance must also be made for the necessarily limited circle within which a Greek must have moved in India, and his natural proneness to see everything through Hellenic eyes and distort or exaggerate anything that was strange or unfamiliar to him. It would be foolish to belittle the importance of the classical accounts of India, but it would be equally unwise to put implicit faith in everything contained in them

Special reference must be made to the classical writers who have elucidated the geography and natural history of India. The earliest of them is the anonymous author of the Periplus of the Erythraean Sea. He was a Greek, settled in Egypt, who made a voyage to the Indian coast about A.D. 80 and left a record of its ports, harbours, and merchandise This short account, full of interesting information, is worth its weight in gold, as it has preserved from oblivion a phase of the trade and martitime activity in

ancient India, otherwise unknown. Ptolemy wrote a geographical account of India in the second century A.D. on scientific lines. His data being derived from secondary sources, he has fallen into numerous errors, and his general conception of the shape of India is also faulty in the extreme. Novertheless the attempt was praiseworthy and has supplied valuable information. The same may be said of Pliny's account of Indian animals, plants, and minerals written in the first century A.D. There were also many other writers of a later date.

These classical accounts, most of which have been translated into English by J. W McCrindle, were generally prompted by a spirit of exploration of unknown lands, and reflect great credit on their authors and the scientific spirit of the age in which they lived The same spirit was displayed a few centuries later by Arab sailors and merchants, some of whom, like Sulaimān and Al Mas'ddi, have left brief records of India. The gap in the interval between the two periods is filled by Chinese writers, both chroniclers at home and pilgrims who visited India.

The writings of the Chinese travellers to India form a valuable supplement to the classical accounts Three of them, Fa-hien (fifth century A D.), Hiuen Tsang, and I-tsing (seventh century A D) are better known than others, and have recorded their experiences in fairly bulky volumes which are happily preserved in their original forms and have been translated into English All three spent a number of years in India and learnt its language, and the first two travelled widely almost all over the country. In these respects they had an undoubted advantage over the Greek travellers unfortunately for the historian of India, these eminent Chinese visitors were all devout Buddhist monks, whose journey to India was merely a pilgrimage to holy lands, and whose outlook was purely religious Neither Fa-hien nor I-tsing refer to secular matters. except very incidentally, nor do they even mention the name of the king or kings whose dominions were visited by them Huen Tsang is not so circumscribed, but gives some interesting information about his royal patron Harsha-vardhana and other contemporary kings of India. He also briefly refers to the political condition of the kingdoms through which he passed, and devotes an entire chapter to a general account of India These are, no doubt. very valuable, but they form only a very small part of his extensive records which like those of Fa-hien and I-tsing, are otherwise devoted to a minute and detailed description of Buddhism in India -its rituals and practices, sanctuaries and memorials, sects and doctrines, scriptures and traditions.

The Chinese travellers have rendered a great service by depicting the state of Buddhism in India. But devout pilgrims as they were, their intense religious faith impaired to a certain extent their

rational instincts and power of impartial observation. We must therefore be on our guard against accepting as literally true all their statements, especially those which concern the Buddhist faith in any way, even when based on personal observation. Their judgment on men and things was warped, if not vitiated, by an absolute and implicit fath in the superiority of Buddhism, and the too intimate, if not exclusive, association with men and institutions connected with that religion. Buddhism alone loomed large in their eyes, everything else taking a subordinate and almost an insignificant place. Such an attitude is hardly compatible with recording an account that may be regarded as strictly historical

From the eighth century A.D. India attracted the attention of the Arab writers Apart from the account of the Arab merchants and sailors, the Indian borderland finds prominent mention in Arab historical chronicles on account of the political aggrandisement of that militant nation which culminated in the conquest of Sind early in the eighth century A D. Two and a half centuries later the Ghaznavid Turks followed in the footsteps of the Arabs and carried the banner of Islam far into the interior of India. India now figured prominently in the Muslim chronicles. The best foreign account of India that this age produced was written by Abū Rīhān, better known as Alberuni, a contemporary of Sultan Mahmud of Ghazni, While the ruthless conqueror was harrying India by fire and sword. destroying and plundering its cities and temples the great Arabic scholar engaged himself in studying the culture and civilization of the country. He learned Sanskrit and studied its different branches of literature. The bulky volume which he wrote is in many respects the most rational and comprehensive account of India ever written by a foreigner until modern times. He is singularly free from religious enthusiasm, bordering on fanaticism, and the racial superiority-complex which mark the Muslim writings of the age. He patiently laboured hard to acquire knowledge of Indian society and culture in a laudable spirit of quest for truth, and brought to his task a liberal and rational mind enriched by profound knowledge, remarkable for his age But from the point of view of Indian history, Alberuni's great work, highly valuable though it is, suffers from two serious defects. In the first place, he says little or nothing of the political condition of India. Secondly, his account rests primarily on his study of Indian literature, and is not based on per sonal observations. In other words, he saw India, not with his own eyes, but through literary works. Alberuni gives an admirable survey of the mathematics, physics, chemistry, cosmogony, astronomy astrology, geography, philosophy, religious rites, customs, social ideas, etc., of India, but we feel at almost every step-and he does not conceal the fact-that he is merely reproducing what he read about these things in books written by Indian authors dead and

gone long ago, and draws little or no inspiration from the living India of his age.

2. THE MEDIAEVAL PERIOD

(THIRTEENTH TO EIGHTEENTH CENTURY)

Alberuni's work closes a long series of accounts written by foreigners about ancient India Two centuries later the Muslim Turks established their political supremacy over India, and introduced the art of compiling chronicles recording the political events of the country. The earliest work of this kund, Tābaqātè-Nāsiri by Minhāj-ud-dīn, composed in the middle of the thirteenth century A.D. traces the history of Muslim rule in India from the very beginning with such fullness of detail as the author could derive from a patient study of all the materials available to him. It was following deserve special mention Ta'rikh-i-Firūz Shāhī by Ziyā-ud-dīn Barani and Shams-1-Sirāj 'Afīf; Gulshan-1-Ibrāhīmī by Muhammad Qāsim Firishta; Āin-1-Ākbarī and Akbar-nāma by Abu'l-Fazl, 'Tabaqāt-1-Ākbarī by Nizām-ud-dīn Ahmad, and Muntakhab-ut-Tavārīkh by 'Abd-ul-Qādīr Budaunī.

There are besides a number of other works dealing with general history as well as provincial states or particular individuals. A fisir idea of the nature and extent of these works may be had from that excellent compendium—The History of India as told by its own Historians—compiled by Elliot and Dowson, in which an attempt has been made to cover the history of the whole period by extracts (in an English translation) from indigenous historical texts

The autobiographies of the Mughal emperors Bābur and Jahāngir, and the biographies of other emperors, kings, and various grandees form a valuable supplement to regular historical works. A part of the official correspondence both of the Central Government and of the various provinces and subordinate states, has also been preserved.

Official despatches or the letters of military commanders, governors, and diplomatic agents are valuable sources of information, and often give accurate dates and details not available from any other source. Mention may also be made of court diaries and newspreports These contain reports of the occurrences and sayings at the Public Durbars of Delhi and provincial courts which were taken down by men specially employed for the purpose by subordinate rulers or important officials. These form valuable materials for the reconstruction of the history of the period, and the monumental work Aint-Akbari gives a most detailed and comprehensive picture of the complex administrative machinery set up by the great Mughal emperor. The bardic chronicles of the Rājouts form an important

class of historical documents concerning the Hindu states of Rājputāna. It is unnecessary to dwell at length on these familiar sources of history, as they will be reviewed in detail in later parts of this work.

The archaeological evidence of the period, highly valuable from the point of view of the history of art, ceases to be of as much special importance as in the ancient period for the purpose of political history. The coins of the early rulers with their dates and mintmarks, as well as inscriptions, often supply valuable additional information, particularly in respect of provincial history which is not so fully dealt with by the Court historians. But they are at best valuable supplements, and save in rare instances, not the sole or even principal sources of information.

The accounts of foreign travellers are also an important, though supplementary, source for the history of this period. One of the earliest is Marco Polo who visited India and other parts of Asia towards the close of the thirteenth century A D. He does not, however, tell us much of the political history The most important in this respect is Ibn Batūta, an African Muhammadan, who spent several years in the court of Muhammad Tughluq He returned to his native country in A D. 1349, after twenty-five years of travel, full of adventures, in various parts of Asia. He has left a vivid account of India of his time whose general accuracy there is no reason to dispute Another important traveller was Nicolo de' Conti. the Venetian, in the fifteenth century. A number of other European travellers in the fifteenth and sixteenth centuries have left interesting information about various parts of India, particularly the powerful kingdom of Vijavanagar. For the Mughal period the voluminous writings of European travellers, including reports of Jesuit missionaries, and official despatches of the Portuguese, French, and English trading settlements, supply a mass of authentic information

For the second period (A.D. 1200-1800), therefore, the historian of India is no longer hampered by lack of material as in the first or earlier period. He can trace the main outline of the political history with essential details, and has not to piece together fragmentary data from coins and inscriptions by a tedious and laborious process. His principal difficulty is to sift the truth from a mass of datas which sometimes contradict one another, and to assess correctly the statements of historians which are not infrequently coloured by passions and prejudices. But these are difficulties which are common to historians of all ages and countries.

3 THE MODERN PERIOD

It is unnecessary to say much on the materials for the history of the modern period, as they present no unusual features. It should

be emphasized, however, that state-papers, i.e. contemporary official documents, now take the chief place among these materials, as in the case of European countries. Such state-papers are not altogether wanting for the Mughal period, but they are, comparatively speaking, few in number and play a minor rôle in the construction of the history of the period. From the eighteenth century they increase in volume and importance, and the Peshwa's Daftars may be cited as a striking example. With the establishment of the British ascendancy these state-papers form the most elaborate and valuable source of information. The servants of the East India Company in India had to keep very detailed written records of their transactions and deliberations for the perusal of their masters in England, and this fortunate circumstance has undoubtedly increased the mass of documents which supply abundant historical material of firstrate importance The correspondence of the various Indian States among themselves and with the British is also very valuable These materials have been partially lost, but a great deal has been preserved and is now kept in the Imperial Records Office in Delhi and the India Office in London. The Records Office in Delhi has been recently reorganized, and proper arrangements have been made for making the records available to students of history and helping their study by means of classification, indexing and printing select documents Numbers of important state papers in Provincial Record Offices, Indian States, and in private possession are also gradually coming to light. These and other materials, to which detailed reference will be made in due course, have considerably facilitated the task of the historian of modern India

CHAPTER III

GENERAL REVIEW OF ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

In every country the historian is dependent upon the archaeologist for information about periods to which written records do not go back. This particularly is the case in India, where practically the entire history of the pre-Muslim period is built up on the study of materials recovered by the investigator and excavator during the last century and a half. The splendid achievements of Indian culture throughout the ages were unfortunately not matched by a sense of historical and geographical accuracy, and except for the metrical chronicle of Kashmir, no other sober history is available for the whole sub-continent The Muslim period witnessed a marked interest in the recording of contemporary history, and occasional ly an exceptional monarch such as Firūz Shāh Tughlug (1351-1388) even made an attempt to explore and preserve ancient relics such as the inscribed pillars of Aśoka, but without any tangible result The study of Indian antiquities was, however, initiated in Bengal soon after the establishment of British power by scholars like Sir William Jones, who founded the Asiatic Society of Bengal in 1784. At first, only linguistic and literary researches occupied the Society's attention. With the turning of the century, a comprehensive survey of the country was started under the orders of the East India Company, and Dr Buchanan Hamilton was the first explorer who carried out this task first in Mysore and Southern India, and then in North Bengal, Bihār, and Assam, in the second decade of the nineteenth century. His report contains the earliest notices of Indian antiquities, and these are recorded with great accuracy and sound judgment. In Western India the caves of Ajanta, Elephanta, and Kanheri were also discovered and described before the turn of the twenties.

The labours of these pioneers brought to light a number of ancient inscriptions recorded on rocks and pillars, but these were written in a script which no one could read. They thus remained a sealed book to scholars till their mystery was solved by James Prinsep in 1837. Prinsep, who was then Secretary of the Asiatic Society of Bengal, has left an interesting account of this great discovery. It is a romance of archaeology fit to rank by the side of the decipherment of the hieroglyphic and cuneiform scripts. For seven years, we are told, Prinsep spread before him, every morning, the estampages of the inscriptions collected from different parts of India and wistfully gazed at the unknown alphabets which con-

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

cealed the mystery of India's past. At last the numerous short votive records on the famous stupa at Sanchi gave him the key. How he hit upon it, almost by a lucky chance, may best be told in his own words, as recorded in Volume VI of the Journal of the Asiatic Society of Bengal (pp. 460-77, 566-609).

"In laying open a discovery of this nature, some little explanation is generally expected of the means by which it has been attained. Like most other inventions, when once found it appears extremely simple; and as in most others, accident, rather than study, has had the merit of solving the enigma which has so long baffled the learned

"While arranging and lithographing the numerous scraps of facsimiles, for Plate XXVII [i.e. the Sanchi inscriptions] I was struck at their all terminating with the same two letters, 5 1 Coupling this circumstance with their extreme brevity and insulated position. which proved that they could not be fragments of a continuous text, it immediately occurred that they must record either obituary notices, or more probably the offerings and presents of votaries, as is known to be the present custom in the Buddhist temples of Ava. where numerous dhwajas or flag-staffs, images and small chattyas are crowded within the enclosure, surrounding the chief cupola, each bearing the name of the donor. The next point noted was the frequent occurrence of the letter (, already set down incontestably as s, before the final word: now this I had learnt from the Saurāshtra coins, deciphered only a day or two before, to be one sign of the genitive case singular, being the ssa of the Pali, or sya of the Sanscrit 'Of so and so the gift,' must then be the form of each brief sentence; and the vowel a and anuswara led to the speedy recognition of the word danam (gift) teaching me the very two letters. d and n, most different from the known forms, and which had foiled me most in my former attempts. Since 1834 also my acquaintance with ancient alphabets had become so familiar that most of the remaining letters in the present examples could be named at once on re-inspection. In the course of a few minutes I thus became possessed of the whole alphabet, which I tested by applying it to the inscription on the Delhi column."

Prinsep then applied, with success, the Sanchi alphabet, as he called it, to the Buddhist group of ancient coins and to other inscriptions, particularly those on the lâts, meaning the Asôkan Edict columns, in Upper India, and gave an analysis of the alphabet columns, in Upper India, and gave an analysis of the alphabet of the application of the alphabet to the inscriptions on the celebrated Asôkan pillars at Delhi and Allāhābād, he gave detailed readings and interpretations of these inscriptions. Thus was the master-key of the ancient Brāhmi alphabet discovered.

Prinsep's great discovery ushered in a new era by lifting the

veil from the earlier Indian inscriptions, and laid the foundation of research in Indian history and practically every branch of Indian archaeology. Hereafter it became possible to evaluate each discovery and assign it to its proper period by a systematic study of contemporary writings. Scholars like Fergusson, Cunningham, Dr. Bhau Daji, and Dr. Rajendra Lal Mitra handed on the torch lighted by Prinsep, and built up the foundations of our present knowledge of Indian architecture, Indian geography, Indian coins and other branches of Indology during the next generation.

The first official step taken by the Government of India was the appointment of General Alexander Cunningham as Archaeological Surveyor to the Government in 1862. This was due to the initiative of Lord Canning, who for the first time realized that the British Government had a duty towards India in rescuing from oblivion her splendid heritage of the past. The choice of so genuine a lover of Indian antiquities as General Cunningham for this pioneer work of exploration and research was very happy, and the record of his devoted labours for nearly half a century, extending over a vast field covering almost every branch of knowledge, is m many ways unique. Starting with the data supplied by the Greek historians and the Chinese travellers, he laid the foundations of an exact knowledge of ancient Indian geography by personal investigations and an almost uncanny gift of spotting and identification of ancient sites. His unrivalled knowledge of Indian particularly those of the north-west, laid the foundation of Indian numismatics, which still has to depend upon his published works in certain branches. Many of his speculations and conjectures may not have been confirmed by subsequent research, but this can be excused in a pioneer who covered so much new ground in half a dozen different fields. Such digging as was attempted at places like Bodh Gayā, Bhārhut, Sānchī, Sārnāth, and Taxilā cannot be considered as systematic excavation, but we must remember that the science of archaeology had not then developed anywhere else beyond quarrying for sensational finds.

After Cunningham's retirement followed a period of nearly fifteen years in which no clear archaeological policy was laid down or followed, although Dr. Burgess and his colleagues were able to publish excellent volumes on the results of the Surveys, mostly of Western Indian caves as also in Southern India. Provincial surveys on a very limited scale and without any central direction or support could accomplish little, but in the closing years of the last century, Lord Curzon, the Vicercy of India, ushered in a new era for Indian archaeology. He accepted the encouragement of research and the promotion of archaeological study as a duty and obligation which Government owed to this ancient country and established a Central Department of Archaeology. Thereafter, the course of archaeology

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

has been tairly continuous, though subject to periodic stimulation and depression.

The Department contained several keen and sound Sanskrit scholars of various nationalities, notably Dr. Vogel, Dr. Stein, Dr. Bloch, and afterwards Dr. Spooner, all of whom were very much interested in archaeological exploration, but none of them had the benefit of taking actual part in the work of excavation as Dr. Marshall (afterwards Sir John), the newly appointed Director General of Archaeology, had in Greece before his appointment. His direction and guidance soon proved to be of the greatest benefit to Indian archaeology, and not only did the European officers of the Department hereafter take a share in the work of excavation, but young Indian probationers were enlisted for training as they were eventually to replace scholars from abroad. In the first few years (1903-12) the programme of excavation largely centred round such iamous Buddhist sites as Sanchi, Sarnath, Kasia (Kuśinagara) and Sahet Mohet (Sravasti). City-sites like Charsadda (Pushkalavati) near Mardan, Bhita near Allahabad, Basarh (Vaisali) near Muzaffarpur. and Raigir the ancient capital of Magadha, were also touched but not persisted in, although they yielded sufficient finds of great importance for the reconstruction of cultural history. The reason for this, as explained by Sir John Marshall himself, was that the researches of the earlier generation of archaeologists had thrown more light on Buddhist antiquities, and besides there was a greater chance of making some spectacular finds in the Buddhist sites than in the more extensive city-sites where it is difficult to locate spots of special importance. Buddhist sites, generally clustered around lofty stupus and readily recognizable from their configuration, are certainly easier to excavate and there is greater probability of making such sensational finds as, for example, the relics of the Buddha enshrined by Kanishka in the stupa near Peshawar city. At Sarnath, the famous lion capital of an Asokan pillar and the great sculptural wealth of the Gupta empire were among the sensational discoveries made.

The idea of bringing to light the successive cultural periods of Indian history by regular excavations at city-sites was entertained about 1912, when Sir John Marshall took up his work at Taxila which was to continue for over two decades. At Pāṭalpuṭra (Patna) Dr. Spooner began in 1913 his examination of the ancient Mauryan capital which was to continue for a number of years, thanks to the liberality of Sir Ratan Tata who provided the entire funds. Unfortunately the latter site, being waterlogged and buried deep under alluvium, did not yield proportionately large results. Strangely enough, some of the most striking finds came from the lower levels exposed in the course of sewage operations and foundations of modern buildings. The excavations at Taxilä, on the other hand,

have vielded steadily growing material which has fulfilled the expectations raised by a city-site situated on the main highway from the north-west, forming, as it were, the crucible in which Indian culture was blended with that of other races coming from that direction during the three or four centuries on either side of the Christian era. The most comprehensive operations ever carried out at any single site in India are those at Taxila, where about a dozen sites have been excavated within an area of some 25 square miles, embracing three separate cities and half a dozen large Buddhist establishments. The earliest city going back to the Mauryan period is that under the Bhir mound, which was superseded by the second and most important city at the site of Sirkap, founded by the Indo-Greek rulers and inhabited during the Indo-Greek and the Saka periods. The wealth of finds, mainly from the second city, that enriches the museum established on the site makes it the most attractive archaeological collection in the country.

While the lay-out of the Mauryan city was irregular and the construction unimpressive, the second town, with its regularly arranged streets and lanes and well-built houses with spacious rooms and courtyards, is one of the best preserved ancient cities, the relies found being among the most representative and valuable dug out anywhere in India. Among the religious sites at Taxilā the most prominent and extensive is the Dharmarājikā stūpa, said to have been founded by the great Ašoka and built over during successive ages and surrounded by scores of smaller stūpas, chapels, and large monasteries. Some of the retreats for the Buddhist monks perched on the neighbouring hillocks, such as those at Jaulian, Kalawan, and Mohra Moradu, provide ample evidence of the flourishing state of Buddhism in the palmy days of Taxilā, which came to an end at the close of the fifth century A.D. with the invasions of the Hūna hordes.

World War I interfered with the progress of exploration, as it was not possible for the Government to spare funds for scientific research However, the Royal Asiatic Society of London sanctioned a small grant for the excavation of the great Buddhist site of Nalandā, and this enabled Dr. Spooner to commence work in 1917 which continued unabated for nearly two decades. Besides the complex of stūpas, temples, and monasteries brought to light in the course of these excavations, Nalandā has yielded unique bronzes and sculptures of great artistic merit as well as inscriptions which have thrown a flood of light on the history of Northern India and the development of Buddhism in Eastern India. The main building here shows signs of having been enlarged and rebuilt no less than seven times, and some of the monasteries show at least three periods of occupation and reconstruction. Nālandā has been the main centre of archaeological work in Bihār since it was taken up nearly thirty thirty

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

years ago. Rājgir (ancient Rājagriha) has also yielded some remarkable finds, notably from the site known as Maniyār Maṭh, but no large-scale examination of this ancient city, one of the earliest historical capitals of India, has yet been attempted.

An epoch-making discovery which changed the course of Indian Archaeology and pushed back Indian antiquities from the Buddhist to prehistoric times was made in 1922-23 when Mr. R. D. Banerji, excavating the ruins of a Buddhist establishment at Mohenjo-daro in Sind, lighted upon certain inscribed seals with pictographic characters which were till then known only from the site of Harappa in the Punjab. The full significance of the discovery was not apparent till two years later, when a comparison of the finds from both the sites convinced Sir John Marshall that they belonged to a prehistoric civilization far earlier than any known so far. Although at first labelled Indo-Sumerian, owing to its obvious affinities with the Sumerian civilization of the third millennium B.C., the newly discovered civilization was subsequently renamed after the Indus Valley, as it was found to be its main habitat. The discoveries stimulated public interest in Indian Archaeology to an unprecedented degree, and the Government of India began to finance liberally schemes of archaeological exploration and research in the different parts of India. For about seven years from 1924-25 the Government grant for exploration gradually rose until it reached the figure of two and a half lakhs which has been the high-water mark in this country. For this the discoveries at Mohenjo-daro are mainly responsible, and under that name is epitomized the progress of Indian Archaeology during the last two decades.

Preliminary excavations were carried on at a large number of sites in Sind and archaeological explorations were extended even to distant parts of Baluchistan (see Map 2). But these subsequent researches have failed to shed any considerable light on the manner m which this well-developed city civilization of the Indus Valley sprang up, as if from nowhere, and also about its equally inexplicable disappearance without leaving any considerable traces of its survival in the Indus Valley or its surrounding regions. Some seven epochs, either slightly earlier or slightly later than the main stream of culture presented by Harappa and Mohenjo-daro, have been identified, but all of them together do not help to bridge the wide gult between this chalcolithic civilization and that of the historic period which flourished in the upper and middle Gangetic basin from the middle of the first millennium B.C. This indeed is one of the most important tasks before Indian archaeology, and demands a great deal of patient and systematic work over a number of years. Field research of this type cannot be attempted by compartments but will require an all-India organization with ample resources at its back and co-operation of various regional units.

The initial success of the Archaeological Department of the Government of India induced many of the Indian States to open their own Archaeological Departments. We shall now review the position regarding exploration in each province and important state. In the province of Sind, which leaped into prominence with the Indus Valley discoveries, the record of archaeology is still very meagre, apart from the Indus Valley finds. Besides a few Buddhist stigns and monasteries, mostly assignable to the Gupta period as at Mirpur Khās, none of the remains can be assigned to a period earlier than the Arab invasion in the eighth century. One reason for this must have been the gradual desiccation of the lower indus Valley. The main interest of the province will therefore vest in the large number of sites of the prehistoric period, scattered over its western half, which have not vet been adequately explored.

In the North-West Frontier Province the great Buddinst sites of Sahri-Bahlol, Takhti-Bahl, and Jamailgarhi have yielded valuable treasures. They fill the local museum at Peshäwar, which is naturally the most important for the Graeco-Buddinst school of Gandiar. The whole district of Peshäwar teems with mounds which are being fast levelled by cultivators to the great detriment of science.

In the Punjab, Harappā and Taxilā have been the most important centres of archaeological works so far The province, however, possesses very interesting possibilities of exploration in the earlier phases of culture. The De Terra expedition, which came to study the lee Age in Käshmir and the Punjab foot-hills, brought to light important palaeolithic industries in the Soan valley which constitute the earliest relices of the Stone Age in the north. The find of a small isolated site of the Indus period near Rupar in the Sutlej Valley, coupled with the presence of a number of mounds in the submontane region of Ambāla, gives the hope that further interesting discoveries concerning the extension of the Indus Valley culture and its survival may be made in this region.

Käshmır, the beautiful valley in the lap of the Himālayas, is the only part of India for which, as noted before, an indigenous written history is available for the pre-Muslim period. The task of identification of the many historical places mentioned in Kalhana's Chronicle fell to Sir Aurel Stein, who successfully accomplished it and thereby laid the foundation of his world-wide fame as an explorer and archaeologist. When the Government of Käshmir opened an Archaeological Department in 1922, it turned its attention to the ancient sites, and eventually some of these were excavated, the result being in most cases a confirmation of Stein's painstaking examination of Kalhana.

The most interesting remains discovered are those of a Buddhist settlement of Kushāna period at Harwan (ancient Shadahradvana)

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

consisting of a stūpa and monasteries on a hill slope with unique terra-cotta plaques ornamenting the walls. Ushkar or Huvishkapura was another early Buddhist site (named after the well-known Kushāņa emperor) where investigation brought to light an early stūpa built in the eighth century. Other sites where excavation was carried out are Parihāspur, Avantipur and the well-known Mārtand, all belonging to the period from sixth to ninth century A.D.

The United Provinces, constituting throughout the historic period "the middle country" (Madhyadesa) or the heart of the Indian sub-continent, hold the key to the solution of many a problem concerning the development of Indian culture. The vestiges of human occupation from the earliest times to the present day can be recognized here in the shape of mounds representing such famous cities of old as Mathura's, Väränasi, Srävasti, Kaušambi and Ahichchhatra. Mathura and its neighbourhood have yielded to the digger the largest number of sculptural treasures, but systematic excavations in the modern sense have not been attempted on a proper scale. The small antiquities from the ancient site of Kaušambi, picked up by casual visitors are more artistic and more numerous than those found annwhere else.

It is by systematic work on the city mounds that Indian archaeology can hope to lay the foundation of a more comprehensive knowledge of Indian antiquities. Such work was commenced at the site of Ahichchhatra in 1941-42 and continued for three seasons. with the object of separating and classifying the different strata of buildings and studying the finds associated with each cultural layer As a result, the pottery, terra-cottas, and minor antiquities found in the excavation of the ancient cities of Northern India can now he assuredly relegated to definite historic periods such as Maurya Sunga Kushana, Gunta and Medieval, on the reliable basis of archaeological stratification instead of merely on grounds of One great desideratum to which attention has been drawn by critics from abroad is the absence of a properly classified corpus of Indian pottery through the ages. For this ample material has now been collected from the Ahichchh tra excavation and from other regular excavations, though on a smaller scale, carried out at such sites as Rāighāt (Benares). Mathurā, and one or two sites in the Punjab and north-west. The continental nature of the civilization of North India makes it inevitable that in each of the main periods the standard form adopted by the craftsmen of the central parts should be the guide for other regions, no doubt with local variations. In certain special periods such as the Mauryan, when the Imperial influence radiated from the capital, it has been found that the special black glazed ware must have been centrally manufactured and specimens exported to outlying districts.

Apart from this the characteristic grey ware of the Sunga period.

the variety of forms prevalent in Kushāṇa times, and the beautiful decorated pottery of the Guptas can now hardly be mistaken, although they may have been manufactured in places as distant from each other as the Punjab and Bengal. The value of the accurate dating of pottery, which is the most abundant material found in surface explorations, has now been sufficiently realized, and this opens the way to a better approximation of the age of surface remains in the absence of such datable material as coins and inscriptions which are not always forthcoming.

In Bengal archaeological excavation has added a new chapter to the cultural history of the province where relics of the pre-Muhammadan period were almost non-existent on the surface. This was at the great site of Pähärpur in the Räjshähi district which took the best part of a decade to excavate and preserve. Here the most remarkable find is the gigantic Buddhist establishment consisting of a towering central temple rising in terraces and surrounded by a vast quadrangle of monastic cells. The plan of the temple showing a grand square cross with projections between the arms, and the scheme of decoration of the walls by rows of terra-cotto plaques interspersed by fine stone images, have thrown a flood of light on the early history of art and architecture in Bengal Some work has also been attempted at Mahasthana, the site of ancient Pundravardhana, and at Bangarh ancient Kotīvarsha, two important cities of North Bengal. The latter work, conducted by the University of Calcutta, constitutes the only attempt made by an Indian University in the field of excavation, which has been thrown open to non-official effort by virtue of an amendment of the Ancient Monument Preservation Act passed by the Central Legislature in 1933. The casual removal of earth for erecting military establishments during World War II has brought to light many remains of ancient structures in the Mainamati Hill near Comilla. A preliminary survey indicates that they are the remnants of Buddhist establishments comparable to those of Pāhārpur, but no systematic excavation has yet taken place in this region

In the provinces of Assam and Orissa the efforts of archaeologists have so far been confined to the investigation of standing monuments and existing ruins

The Central Provinces and Central India constitute the richest field for epigraphical discoveries, but no systematic excavation of ancient sites has so far been attempted in the Central Provinces. In Central India good work has been carried on in Gwallor State where the remains of the ancient cities of Vidišā (Besnagar), Padmavatí (Padma-Pawaya), and Ujjain have been excavated by the state archaeological department The great site of Sänchī in Bhopāl has been weil excavated by Sir John Marshall. There is a great scope for the detailed investigation of remains, both of the historic and

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

prehistoric periods, particularly in the basin of the Narmadā river which has already yielded remains of palaeolithic and microlithic industries.

In Rājputāna, the late Sir Aurel Stein's examination of the dried bed of Hakrā (ancient Sarasvatī) has brought to light a number of pre-historic sites in the Bikāner and particularly Bahāwalpur States. Systematic excavation in Rājputāna is confined to Jaipur where the ancient sites of Bairāt, Rairh, and Sāmbhar have yielded a large number of antiquities, including hoards of punch-marked coins and terra-cotta figurines. Bairāt has a unique circular temple of the Mauryan times, and Rairh appears to have been a flourishing metal-lurgical centre and trade mart. The most extensive site in Jaipur is the city of Nagar or Karkotnagar, now represented by extensive mounds recently taken up for excavation which, if carried through, is sure to shed light on the history of the Mālava tribe whose capital it was

An important undertaking, recently initiated by the Archaeological Department and now taken over by the Ancient History Department of the Deccan College Research Institute, Poona, is the expedition which has investigated the prehistoric remains in Gujarät This expedition, undertaken at first with a view to determine the relation of the paleolithic and neolithic remains found in the Sābarnatī valley by Bruce Foote, the pioneer of Indian prehistory, has succeeded in bringing to light at Langhnaj, near Mehsana, Baroda, State, skeleton remains in an advanced stage of calcination in association with microlithic implements. The success of the expedition has induced help from the Tata Trust fund, and the further continuance of the work by a non-official body like the Institute is thus assured. Minor excavations at various ancient sites such as Anhilpur, Pātan, Amreli, and Mul Dwārakā were carried out by the Archaeological Department of the Baroda State.

In the Province of Bombay the prevalence of tran throughout the Mahārāshtra area accounts for the paucity of stratified accumulations at ancient sites. In portions of the Karnātak district of Bijāpur recent examination of the surface has brought to light the existence of several strate going back to the pre-Mauryan age. Recent work at the ancient city of Kolhāpur has also yielded considerable material of the Sātavāhana and later periods, incidentally throwing light on contacts with Rome.

The most important centres of Sātavāhana power were in the Deccan, and it is there that we must look for further extensive evidence of culture in the Sātavāhana period. The Hyderābād Government has conducted excavations in the ancient capital of Paithan (Pratishthāna) and more recently at Kondāpur in the Bidar district. The latter site is a veritable mine of antiquities which include numerous specimens of all types such as terra-cotta and stucco

figures, coins and medals numbering several thousand, and pottery. The material discovered here and at the great site of Maski has not yet been adequately studied, and it is essential that it should be properly published if its scientific value is to be enhanced. The Archaeological Department of the Hyderābād State, started in 1915, has recently taken up the programme of archaeological exploration and excavation, and it may be confidently hoped that its work will be commensurate with the great importance of the remains situated in the dominions.

Mysore led the way among Indian States in archaeological investigation by starting a regular department over sixty years ago. At first the activities of the Department were concentrated on a survey of the epigraphic material in which the state abounds, and on which the history of the dynasties that ruled Mysore is almost wholly based Latterly some attention has been devoted to the excavation of ancient sites of which two have proved to be of very great value. The site of Chandravali near Chitaldrug was exvavated in 1928 and shows several strata of occupation in which the northernmost part of Mysore shows not only the relics of the Mauryan town of Isila, but also those of later historic period:, and, what is more, was founded on earlier settlements of microlithic age.

In the Madras Presidency, the vast number of existing temples and inscriptions have absorbed the main attention of the Archaeological Survey Although the number of sites of every period are numerous, excavation has so far been attempted only in some of the Buddhist sites in the northern districts and the well-known prehistoric burials at Adıchanallur in the extreme south Of the Buddhist sites the most important are those in the Krishna valley in which the local rulers of the Ikshvaku dynasty seem to have patronized art in a larger measure than any of their predecessors. Many ancient monuments before the organization of the Archaeological Department, such as the Amaravati stups in the Guntur district, had already been wellnigh destroyed by villagers and other vandals and their sculptures distributed among different museums, including the British Museum Recently the discovery of an important site at Nagarjunikonda has to some extent made up for the loss Systematic excavation has brought to light another group of stupus and monasteries, arranged in a characteristic manner, which have yielded a vast number of sculptures and inscriptions The site is beautifully situated in the Krishna valley and was anciently known as Śri-Parvata. A local museum has been built on the spot for housing the sculptures and architectural specimens unearthed Some work was done recently at the site of Virampattanam, near Pondicherry, the seaport in which, as in many other south Indian sites, evidences of commercial contacts with Rome during the

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

Imperial period are abundant The problem of Megalithic burials in South India is vast and complicated, and much damage has already been inflicted by ill-advised digging on the graves associated with stone circles, urn burials, sarcophagi, etc, which occur over extensive areas in Southern India. At Adichanallur a large number of antiquities, including iron swords, daggers, gold and bronze diadems. bronze vessels and animal figures, etc, were found, along with a large amount of red-and-black polished pottery, forming the accompaniments of the burials.

The whole subject has now been assiduously studied and we can expect the results of these studies to throw light on the movement and settlement of different types of people in the Peninsula. The entire field of palaeolithic, neolithic, and megalithic as well as iron age cultures in Southern India is so vast, and transcends in interest investigations relating to the historic periods, that it is likely to form a major preoccupation for several years. The states of Southern India, including Travancore, Cochin, and Pudukottai, have each its own contribution to make to this subject, not to speak of the larger states of Hyderäbäd and Mysore

No account of the activities of Indian exploration can be complete without reference to the work carried out in what may be called Greater India The most brilliant work carried out by the late Sir Aurel Stein constitutes the greatest achievement that can fall to the lot of a single scholar and explorer. Sir Aurel Stein's activities were spread over a very wide field, including Baluchistan, Irân, and the border lands of India But his most famous explorations were conducted in Chinese Turkistan. In the course of the several expeditions which Sir Aurel Stein carried out for the Government of India he discovered numerous relics of the ancient civilization which developed in the region. These have been preserved in the dry sandy wastes and show the highly important part which India played in the Far East, and the way in which Indian cultural influences were spread there. The state of preservation of the fresco paintings in the Buddhist temples wooden, silk, and paper documents, and other perishable objects is remarkable. These objects, recovered from Central Asia, have been carefully brought back and preserved in a special museum erected at New Delhi by the Government of India.

In Burma which formed part of India till ten years aco. activities were mostly confined to the centres of Prome, Pegu, and Pagan Excavation has been generally confined to opening up small mounds lying in abundance at these centres, particularly Prome. marking the sites of old stipps or temples. The earliest finds are those at Prome in which Indian influence is very prominent Although Hinayāna Buddhism and the Pāli tradition have now acquired a great hold on Burmese Buddhism, it is clear that a large propor-

tion of the earlier colonizers were followers of the Mahāyāna sect and the Brahmanical religion, and it was not till a comparatively later period that the Hinayāna triumphed over its rivals. Bilingual inscriptions from Prome show the language of the old Pyu inhabitants side by side with Sanskrit. At Pagan excavations have brought to light a number of finds belonging to the eleventh and twelfth centuries, when modern Burmese culture may be said to have originated. At this period Burma was subject to a great deal of influence from India, especially Bengal, in sculpture, painting, terra-cotta, and architecture. It has now been well established that the planning and scheme of decoration of Burmese temples and pagodas is based on Indian prototypes developed in the alluvial plans of Northern India for centuries.

In the Malay Peninsula exploration work has not proceeded on a large scale, but whatever has been done shows a strong Indian influence in the beginning of cultural history. The existence of the great Sri-Vijaya Kingdom in Indonesia, and its paramount influence over the islands in the Netherlands Indies, has now been clearly established by researches. The great monuments in Java, belonging to the Brähmanical as well as Buddhist faiths, such as the Barabudur, Chandi Sewu, and Chandi Lara-Jongnang amply demonstrate the extent of Indian culture. Lastly, reference may be made to the researches and explorations of the French archaeologists in Indo-China which have thrown a flood of light on Indian colonies of Champā (Annam), Kambuja (Cambodia), and Dvāravati (Siam), and led to the discovery of such monuments as Angkor Vat and Angkor Thom of world-wide fame.

In Cevlon there is vet a vast field for exploration and excavation, but work so far has been mainly confined to the ancient capitals of Anuradhapura and Polonnaruwa Originally European scholars were in charge of the work, but a properly trained Ceylonese scholar has now been appointed Archaeological Commissioner, and he is responsible for the excellent work done at the hill site of Mihintale stung which is reminiscent of Sanchi. Several of the religious sites at Anuradhapura have received attention, but the vast remains of the ancient city have not yet been tackled. A large number of smaller sites in the south of the island have yet to be explored, specially for prehistoric remains in which Ceylon seems to be particularly rich, and a good beginning has been made in this direction by the Director of Museums in Ceylon. Of all countries bordering on India, Cevlon is the most intimately connected with her culture both in the prehistoric and historic periods. and it is but natural that research in both countries should go hand in hand in close co-operation.

Afghānistān has in several periods of its history formed part of India, and some of its most striking remains, as at Hadda, testify

ARCHAEOLOGICAL EXPLORATIONS AND EXCAVATIONS

to the influence of Buddhism in that country. Some of the most important contributions to early Indian Epigraphy and Numismatics were based on finds made in Afghānistān. Recently a French mission conducted a series of excavations at Begram and other places which have thrown considerable light on its Indian connections.

In conclusion it may be observed that while archaeological exploration has been placed on a fairly strong foundation in this country and much has been achieved so far in bringing to light and interpreting first-rate material for the reconstruction of India's ancient history, a good deal yet remains to be done, and it would require the unabated efforts of generations of properly equipped archaeologists to bring the task to a reasonable state of completeness While interest in the subject should be progressively widened throughout the length and breadth of this country, it is necessary that proper co-ordination should be established and much more financial support assured. Above all it is essential that a strong centre should foster and guide the activities of workers throughout the country Indian unity, as exemplified throughout its history, is all the more necessary in the study of India's past, and any compartmental treatment is bound to result in stagnation. Through the immensity and diversity of India there runs a thread of unity which must be kept in view in any attempt to organize work for the systematic investigation of the past, and it is hoped that this consideration will never be lost sight of

CHAPTER IV

THE GEOLOGICAL BACKGROUND OF INDIAN HISTORY

It is a truism that the course of human history in a region is, in a considerable measure, shaped by its physical and geographical features, which, in turn, in the ultimate, are determined by the geological history the region has passed through in the dim vista of time. Five thousand to ten thousand years ago North India must have offered to the early settlers from Asia, whatever race they belonged to, or from wherever they came, a congenial habitat, in pleasing contrast to the arid and inhospitable steppes of the Aralo-Caspian region, or the rugged mountains of the Irân-Afghailstân-Turkistân plateau. This migration to a quite new physical environment could not but have influenced and largely shaped the trend of history and civilization of the races involved.

Of the three natural physical divisions of India, as we shall see in the sequel, the part which was most suitable for human occupation and to function as the nursery of civilization is the great central tract of the Indo-Gangetic plains. Here were present all factors favourable for life-climate food-supply, water, and vegetation This vast expanse of flat alluvial plains of high fertility, watered by a number of perennial rivers, deriving their fertilizing waters from the snows of the Himālavas must have attracted hordes of migratory peoples in successive waves from many parts of Western and Central Asia. The great alluvial plains of India extending from Sind through northern Rājputāna Punjab, U P, Bihār, and Bengal to Assam, an area of over 300,000 square miles, must have offered, as the centuries passed by, an exceedingly delectable home to early man long before the earliest beginnings of recorded history But the geological beginnings of the sub-continent of India, as we know it today, date back to an antiquity of which it is difficult to give a concent save in terms of astronomical figures of years

Human history, proto-history, and archaeology begin where the last chapter of our planet's geological history ends. Man's existence on earth dates a long time behind the oldest known records of authentic archaeology, but fragmentary documents of his file in various regions of the earth, of his slow progress in culture and industry, and the relics of his contemporary animals lie buried in the top layers of the earth's crust—the strata of geology which form what has been called its Sub-Recent period. Thus the background of the history of all human races on earth is this zone of strata in the upper crust or shell of the earth's body, laid down in

THE GEOLOGICAL BACKGROUND OF INDIAN HISTORY

surface deposits, river valleys, deltas, lake-basins, glaciers, etc. In these are preserved traces of the existence of man and of the physical and climatic conditions of the time, they are designated in general as the Piestocene system, representing the last epoch of the third and latest division of geological time, the Cainozoic Era

A full account of the Pleistocene under these heads is luckily preserved in India: it is of great value as linking up prehistory with the geological history of a large section of southern Asia. It was this age that saw the completion of the main outlines and relief of the earth as we see it today—its seas and continents, mountains, plateaux, and plains, though climatically the world had yet to witness one of the greatest revolutions, viz. the gradual freezing of the northern regions culminating in what is known as the Ice Age.

INDIA IN THE PLEISTOCENE PERIOD

1. The Setting of the Stage for Early Man in India

Pleistocene geological records found in India form an extensive warned storehouse of materials for the last million years or so, immediately preceding the Recent and Sub-Recent epochs. They carry the human records forward to so late a date as the Neolithic curca 10,000 years B.C). In terms of years the Pleistocene dates back, according to modern estimates, to one million to two million years. The formations enumerated below have an important bearing on man's prehistory as they contain in them numerous documentary relics entombed in the form of his skeletal remains, his artifacts and other proofs of his handiwork, industry, and culture. It is in these that the key to the stages of human evolution might be found.

The principal Pleistocene and Sub-Recent remains in India may be classified as follows:—

- Deposits of the Ice Age in India, Glacials of Outer and Middle Himālayas.
- (ii) The Indo-Gangetic alluvium of the plains of North India (iii) The older alluvium of the peninsular rivers, high-level river terraces of the Himālavan valleys.
- (iv Old Lake Deposits (Karewa Series) of the Upper Jhelum Valley in Kāshmir.
- (v) Cave Deposits. Human cave-dwellers and their animal contemporaries.
 - (vi) Laterite Cap of the Peninsula: Loess and soil deposits.
- (vii) Changes in the river-systems and drainage of North India
- $\left(viii\right)$ The Desert of North India: the growth of desert conditions.
 - (ix) Late Earth Movements, volcanoes and earthquakes.

Interesting glacological investigations have been made in the Käshmir Himälayas and in the Karakoram by a number of explorers and naturalists. The Central and Eastern Himälayas have not received the same attention. It is, however, well known that throughout these mountains grooved and polished rock-surfaces, produced by the scouring action of the glaciers, occur at elevations above 6,000 feet, whereas the present limit of Himälayan glaciers is 13,000 to 15,000 feet. Numerous lakes and rock-basins of Käshmir, Ladakh, and Kumaon directly owe their origin to the action of glaciers now no longer existing. Four distinct phases of glaciation, separated by three inter-glacial intervals, have been recognized in Käshmir by their moranes.

Whether India, south of the Himālayas, passed through an lee Age has been a much-discussed subject. It must be understood, however, that the present zonal distribution of climate being assumed, we cannot look for the presence of ice even on the highlands of South India, because a refrigeration which can produce ice-caps in the latitudes of Europe would not be enough to depress the temperatures in India beyond that of the present temperate zones. But some indirect evidences of considerably lowered temperature are observed in the increased humidity and a succession of cold pluvial periods having affected the distribution of several cold-loving species of animals and plants then living in India. This enables us to explain the occurrence today of some Himālayan temperate flora and fauna in such isolated centres as Mt. Abū, Pārasnāth, in the Nilgiris and even in the mountains of Ceylon, and their absence throughout the intervening plains of India.

Man was contemporaneous, in N. W. India probably, with the two later glacial advances, as some late discoveries tend to show. De Terra records the presence of implements worked by man in deposits in the outer ranges of Käshmir and in the Soan valley, belonging approximately to the second Glacial. He correlates the European Chellean and Acheulian with the early Soan cultures and dates this as Mid-Pleistogene.

2. The Indo-Gangetic Alluvium of the Plains of North India

As noted above, by early Pleistocene time, the dominant features of India's geography had taken shape, and the country had acquired almost its present form and its leading topography except that the land in front of the newly upheaved Himalayas formed a great longitudinal depression, complementary to the rising mountains, and parallel with them. This trough, at first occupied by salt-water lagoons, gradually freshened, and, receiving constant influx of detritus from the high ground above it, from hundreds of descending streams, began rapidly to be filled by the waste of the Himalayas This long-continued vigorous sedimentation loading

THE GEOLOGICAL BACKGROUND OF INDIAN HISTORY

a narrow, slowly sinking belt of country, the deposition of the debris keeping pace with the subsidence, has given rise to the great Indian plains. The continuous upheaving of the mountains must have rejuvenated the streams, multiplying their sediment-depositing power. Thus these plans have come to acquire the simplest geological structure, the alluvial filling a large structural basin in the tramework of India.

The greater part of the Indo-Gangetic plains is built up of very late alluvial flood deposits of the rivers of the Indus-Ganges systems, borne down from the Himālayas and deposited at their foot. But most of this terrain became firm and dry enough to be habitable for man only some 5,000-7,000 years ago. Buried beneath this mantle of clay and sand are valuable geological records linking up the Deccan with the Himālaya system. Its geological structure. composition and history therefore possess no great interest though. humanly speaking, it is of the greatest economic as well as historical importance. It has no mineral resources, but its agricultural wealth and fresh underground water stored in the more porous and coarser strata, accessible by ordinary wells and tube-wells, are the highest economic asset of India. Though devoid of records other than those of the vesterday of geological time, these alluvial plains are the stage of the main drama of Indian history since the Aryan occupation.

The area of these plains is 300,000 square miles, covering the most thickly populated and the most fertile part of India. The total thickness of the alluvium consisting of beds of clay, silt, and sand is not ascertained, for the deepest borings (for water down to about 2,000 feet) have not reached the bed-rock. There is a considerable amount of flexure and dislocation at the north margin of the trough, where it passes into the zone of the parallel boundary faults at the foot of the Himālayas. This structural strain explains the well-known seismic instability of this part of India, it being the belt encompassing the epicentres of the majority of the known Indian earthquakes. Many of the river courses of the plains have undergone great alterations. These rivers are bringing enormous loads of silt from the mountains and, depositing it on their beds, raise them to, and even above, the level of the surrounding flat country through which the streams flow in ever-shifting channels. This has been the history of many of the rivers of the plains The deltas of the large rivers were mostly constructed within prehistoric times, though their surface and outline have undergone material changes during the last few centuries. The Indus and Ganges deltas each cover about forty thousand square miles

The extensive alluvial tract of Gujarāt on the west coast is of the same age as, though quite unrelated to, the Indo-Gangetic system. Its constitution shows that it is not wholly the work of

tne rivers, but that in its making the combined agency of river, estuarine and marine coastal depositions has operated.

These ancient alluvial deposits are of value in the study of early and middle Pleistocene as they are characterized by the presence of some of the earnest undoubted traces of man's existence in India, and furnish an easily accessible field to the student of early numan culture in India.

The aliuvial plains of the Naimada and Tapti are remarkable as lying in deep lock-basins at over 500 feet elevation above the present beds of these rivers Scattered in the clay, sand, and gravel beds are bones of the buffalo, horse, bear, an extinct species of rhinoceros, hippopotamus, elephant, and crocodile. A chipped stone hatchet, fashioned out of quartite rock, was discovered in 1872, buried in the steep face of a gravel terrace of the Narmada at a site eight miles north of Gadawara. This is the earliest prehistoric relic of man discovered in India and is regarded as of the pre-Chellean Age. This fact suggests the settlement of the Narmada valley by an early palaeolithic race. Another valuable relic. also believed to be of genuine human workmanship, was discovered in a terrace of the upper Godavarı at a level of about twenty-five feet above the present bed of the river. It is a knife fashioned out of an agate flake, 24 inches long, the sharp cutting edge of which is blunted by long usage From the association of human remains with large mammalia which differ from the existing Indian fauna in some material respects, the age of these implements can be taken to be Lower Pleistocene The distance in time of these animals from their present-day descendants gives us some measure of the antiquity of the human settlements on the Narmada and the Godavarī

Various alluvial deposits of the Jumna-Ganges rivers and their ributaries are somewhat newer in age and have been assigned an antiquity intermediate between the Narmada-Godavari beds and the Mid-Pleistocene, from the evidence of fossil-bonos and the few artifacts that have been found in them. Lately signs of the existence of palaeolithic man have also been obtained from the valleys of the Tungabhadra and the Orsang Recent discoveries since 1935 in the valleys of the Soan (near Rāwalpindi) and in the Sābarmati of north Gujarāt of interesting suites of stone tools, axes, scrapers, and choppers also throw light on the length of the epoch that intervened between the palaeolithic and the commencement of historic time.

3. Human Cave-Dwellers of India Their Animal Contemporaries But few caves of archaeological interest exist in India and out of these only one group has received the attention of palaeontologists and been subjected to systematic exploration. The only

THE GEOLOGICAL BACKGROUND OF INDIAN HISTORY

ones that have been systematically investigated and yielded data on Pleistocene cave life are the group of small caves (Billa Surgam) near Banganapalli in the Kurnool district. From the stalagmitic floor a large assemblage of bones has been dug out, belonging to a mixture of Recent and Sub-Recent species, viz. a monkey, a hyaena, several cats, bear, a small equus, mongoose, bat, squirrel, a shrew, rats, small deer, gazelle, wild boar, along with an extinct type of rhinoceros, wild boar, civet-tiger and giant pangolin. Palaeontologists have assigned to this fauna a horizon near to the Upper Pleistocene top of the Palaeolithic. Among the human implements found in the Billa Surgam caves are numerous bone tools, very few stone tools being so far recorded. These are referred to the middle or upper Palaeolithic.

The Kurnool caves help to present a fragmentary picture of the land life that prevailed in India just prior to the time when man began to domesticate animals for his own use. This life bridges the gap between the end of the Siwalik, a period of maximum development of the higher mammalian species, and the beginning of the Neolithic, when man began to take to pastoral and agricultural pursuits.

Since early Siwalik times there has been a more or less constant intercourse between East Africa, Arabia, Central Asia and India maintained by the migrations of herds of mammals. Pilgrim has stated that the magnificent assemblage of land mammals we witness in the later stages of the Siwaliks was not truly of indigenous India origin. According to him it is certain that it received large accessions by migration of the larger quadrupeds from Egypt, Arabia, Central Asia, and even from distant North America by way of land bridges across Alaska, Siberia, and Mongolia.

There seems little doubt that our races of domestic animals are the durect descendants of the post-Siwallik species through the greatly decimated population that inhabited the Kurnool caves and the basins of the Narmadā and the Godāvarī The Siwalik ancestry of the Indian camel and the buffalo is beyond any doubt, whilst the short-horned and humped cattle of India had as their progenitors the Bos primigenius of the Siwalik through Bos nomadicus of the Narmadā age. With a varied and abundant animal population as their co-denizens in the fertile and well-watered plains of North India it is no wonder that early man in India was among the first to tame some of the more prized varieties for companionship and domestic service.

4. Laterite Cap of the Peninsula and Soil Deposits

Among the geographical, geological, and geophysical factors which have influenced the course of history in India and governed the distribution of large bodies of population over its surface, the

peculiar formation, laterite, is of importance. In many ways its influence was the opposite to that of the Indo-Gangetic alluvium, for whereas the country covered under this geological formation invited man's settlement and provided a hospitable base for sustaining life, the laterite rock terrains are generally soilless, comparatively sterile expanses of hard ground, difficult to till, and poor in surface and underground water resources, and drove man to easier conditions of existence.

5. Changes in the River Systems of North India during the Human

The hydrography of North India for a considerable portion of the Pleistocene epoch was protoundly different from what we find today. Few changes in the physical geography of India during early historical times and in Sub-Recent age have been so well proved as the changes in the river-systems of northern India. Following the great geographical revolution of the later Tertiary ages the old dramage lines of northern India have been readically altered and a new dramage system superimposed. The number, volume, and direction of the majority of the units of this dramage bear evidences of these changes, which in some instances, amounted to a complete reversal of the direction of flow of a principal river such as the Ganges.

The drainage pattern of Peninsular Inda is of great antiquity and has persisted more or less unchanged since the early Gondwana era. On the other hand the northerly drainage of the Deccan, flowing to the shores of the Himālayan Sea (the Tethys) in Gondwana times, was completely disorganized in the beginning of the Tertiary, and subsequently during the late Tertiary and post-Tertiary all its main lines were buried under the 200 mile wide belt of alluvial plains of the north from Sind to Manipur. The present valley system of northern India, one of the youngest hydrographic systems of the world, has inherited nothing from the old, it being an entirely superimposed drainage, with no relations whatever to the old river-courses.

6 The Great Prehistoric River of Northern India

Ample evidence is found on the subject of the common ances try of the Brahmaputra, Ganges, and Indus rivers, their reversal and capture before attaining their present state which has influenced the course of Indian history at many a turn and corner. It was the notable pre-historic river, named the "Siwalik river" by Pilgrim, that flowed from the head of the Sind gulf to the Punjab and thence along the foot of the embryonic Himālaya chains, through Simla and Naintal to Assam. Post-Siwalik earth movements in North-West Punjab brought about a dismemberment of this river

system into three subsidiary systems. (1) The present Indus from North-West Hazāra, (2) The five Punjab tributary rivers of the Indus: (3) The rivers belonging to the Ganges system which finally took a south-easterly course.

The severed upper part of the Sawalak Raver became the modern Ganges, having in course of time captured the transversely running Junna and converted it into its own affitient. The transverse Himālayan rivers, the Alaknandā, Karnali, Gandak, and Kosi, which are really amongst the oldest water-courses of North India, continued to discharge their waters into this new river, irrespective of its ultimate destination, whether it was the Arabian Sea or Bay of Bengal. During Sub-Recent times some interchange took place between the easterly affluents of the India and the westerly tributaries of the Junna by minor shifting of the water-shed, now to one side now to the other. There are both physical and historical grounds for the belief that the Junna during early times discharged into the Indias system, through the now neglected bed of the Sarasvati river of Hindu tradition, its present course to Prayāg being of late acquistion.

The Punjab portion of the present Jhelum, Chenāb, Rāvi, Beās, and Sutlei have originated from the uplift of the topmost stage of the Siwalik system and subsequent to the severance of the Indus from the Ganges. The Potwar plateau-building movements could not but have rejuvenated the small rivulets of southern Puniab. which until now were discharging into the lower Indus: the vigorous head-erosion resulting from this impetus enabled them to capture, bit by bit, that portion of the Siwalik river which crossed the Potwar on its westerly course to the Indus. Ultimately the head waters, joining up with the youthful torrents descending from the mountains, grew in volume till they formed the five important rivers of the province, having their sources in the snows of the Great Himālaya Range. The western portion of the broad but now deserted channel of the main river, after these mutilating operations, has been occupied today by the puny, insignificant stream of the Soan, a river out of all harmony with its great basin in the enormous extent of the fluvialite deposits with which it is choked.

7 The Deserts of Western India: The Rann of Cutch

The origin of 40,000 square miles of the Rājputāna desert with its curiously worn and sand-blasted topography is attributed, in the first instance, to a long continued and extreme degree of aridity of the region combined with the sand-drifting action of the south-west monsoon winds, which sweep through Rājputāna for several months of the year without precipitating any part of their contained moisture. A certain proportion of the desert sand is derived from the weathered debris of the rocky prominences of this tract. Which are

subject to the great diurnal as well as seasonal alterations of temperature characteristic of all and regions. The daily variation of heat and cold in some parts of Rājputāna often amounts to 100 degrees Fahr. in the course of a few hours. The seasonal alteration is greater. This leads to a mechanical disintegration of the rocks, producing an abundance of loose debris, which there is no chemical or organic action (humus) to convert into soil.

The Rann of Cutch .- Once an inlet of the Arabian Sea and now a saline marshy plain scarcely above sea-level, its sandy metal enclosing deep pockets of millions of tons of pure salt, the Rann of Cutch bears signs of late geological alterations of level caused by earth movements and owes its present condition to the geological process of the Pleistocene age. From November to March, the period of the north-west monsoon, the Rann is a barren tract of dry salt encrusted mud presenting aspects of inconceivable desolution. During the other half of the year it is flooded by waters of the rivers that are held back owing to the rise of the sea by the south-west monsoon gales A very little depression of this tract would be enough to convert Kāthiāwār and Cutch into islands On the other hand if depression does not take place, the greater part of the surface of the Rann will be gradually raised by the silts brought by the river with each flood, and in course of time converted into an arable tract, above the reach of the sea, a continuation of the alluvial terrain of Gujarāt.

8. The Meteorological Influence of the Himālaya Mountains

The Răjputāna desert conditions have thus accentuated with time, the water action of its few streams being too feeble to transport to the sea the growing masses of sand. But that the Indian desert is not of greater extent, or that it shows no tendency to expand in girth is due to the meteorological influence exerted by the Himālaya range. It has protected northern India from the gradual desiccation that has overspread Central Asia from Khorasan in eastern Persia to Mongolia since early historic times, and the desert conditions that inevitably follow in the heart of a continuer.

9. Earthquakes and Volcanoes

Earthquakes—The Peninsula of India is a region of great geological stability and is remarkably immune from seismic disturbances of any intensity. But in the extra-peninsular India the recorded earthquakes since even late historic times form a long catalogue of tragedies. It is a well-authenticated generalization that the majority of Indian earthquakes have originated from the great plains of India, or from their peripheral tracts.

Of the great Indian earthquakes recorded in the last two centuries and of which some accounts can be traced, the best known are:

THE GEOLOGICAL BACKGROUND OF INDIAN HISTORY

Delhi, 1720; Calcutta, 1737; Eastern Bengal, 1762; Cutch, 1809; Käshmir, 1885; Bengal, 1885; Assam, 1897 (one of the most disastrous earthquakes recorded in world history); Kangra, 1905; North Bihār, 1934; Western Baluchistān, 1935. The area encompassed by these quakes is the zone of weakness and strain caused by the severe crumpling of the Himālayas within recent times. The structurally disturbed and displaced belt has not yet attained stability of quiescence. It falls within the great earthquake belt which traverses the circumference of the earth east to west, from Japan through the whole breadth of Eurasia across the Atlantic and the North American continent to California.

Volcanoes.—There are no living or active volcanoes anywhere in the Indian region today. A recently extinct volcano lies far on the west border of India in the Nushki desert of Baluchistām—the large extinct crater of Kohi Sultan. The Malay line of living volcanoes—the Sunda Chain—some of the most active volcanoes of the recent age, if prolonged to the north, would connect a few dormant or lately extinct volcanoes belonging to this region. Of these the most important is the now dormant volcano of Barren Island, to the east of the Andaman island group The last time it was observed to be in eruption was early in the nineteenth century

10 Late Earth-Movements and Local Alterations of Level

Though movements of the mountain-building kind have not visited the peninsular part of India for an immense length of geological time, there have been a few late vertical movements of secular upheaval and depression, some of these of considerable amplitude, involving uplift or sinking of large crust-blocks, while others were of minor or local type. Of these the later minor alterations of level recorded within the Pleistocene concern us here. Within these times an appreciable elevation of the peninsula, exposing portions of the submerged coastal plains as a shelf or platform round its east as well as west coasts, is the most notable. Such "raised beaches" are found at altitudes varying from a few feet to 150 feet in many places on the Malabar and Coromandel coasts, while marine shells are found at several places some distance inland far above the level of the tides Marine and estuarine deposits of post-Teritary age are met with on a large scale towards the southern extremity of the Deccan Besides these evidences of a rather prominent uplift of the peninsula, there are also proofs of minor, more local alterations of level, both elevation and depression. The existence of beds of lignite and peat in the Ganges delta, the submerged forest discovered on the east coast of the island of Bombay and peat deposits near Pondicherry are proofs of slow downward movement Evidences of upheaval are seen in some coral reefs along the coasts, low-level

raised beaches on various parts of the Ghats, and recent marine accumulations above tide level.

The submerged forest of Bombay is nearly twelve feet below low-water mark and thirty feet below high water; here a number of tree stumps are seen with their roots in situ, in the old soil. On the Tinnevelly coast a similar forest or fragment of old land surface is seen slightly below high-water mark. At Pondicherry, 240 feet below ground-level, a thick bed of lignite is found, while in the Ganges delta layers of carbonized vegetable debris occur. About twenty miles from the coast of Mekran the sea deepens suddenly to a great hollow. This is thought to be due to the submergence of a cliff formerly lying on the coast. The recent subsidence, in 1819. of the western border of the Rann of Cutch under the sea, accompanied by the elevation of a large tract of land (the Allahbund). is the most striking event of its kind recorded in India and was witnessed by the whole population of the country. Here a tract of land, some 2,000 square miles in area, was suddenly depressed to a depth of twelve to fifteen feet, and the whole tract converted into an inland sea. The fort of Sindree, which stood on the shores, the scene of many a battle recorded in history, was also submerged underneath the waters, and only a single turret of that fort remained, for many years, exposed above the sea. As an accompaniment of the same movements, another area of about 600 square miles was simultaneously elevated several feet above the plains, into a mound which was appropriately designated by the people "Allahbund" meaning "built by God." The elevated tract of land known as the Madhupur jungle near Dacca is believed to have upheaved as much as 100 feet in quite recent times. This upheaval caused the deflection of the Brahmaputra river eastward into Sylhet, away from the Ganges valley. Since this change the Brahmaputra has again changed its course to the west

In the foregoing account of the later geological deposits of India there is everywhere a gradual passage from the Pleistocene to the Sub-Recent and thence to the prehistoric and the Recent These periods overlap each other much as do the periods of human history, and there is no general agreement as to the exact limits of each

CHAPTER V

THE GEOGRAPHICAL BACKGROUND OF INDIAN HISTORY

I. PHYSICAL FEATURES

India is a vast country well marked off from the rest of Asia by its mountain wall on the north, north-east, and north-west, and the sea on the remaining sides. Roughly speaking, the territory comprised within it is about 2,500 miles from east to west and 2,000 miles from north to south, with an approximate area of 1,800,000 sq. miles. It has 6,000 miles of land-frontier and 5,000 miles of sea-frontier.

Looking broadly at the physical features of the country we can easily distinguish three main parts, viz (1) the great mountain wall; (2) the great lowland plain of Hindusthän; and (3) the great Deccan plateau.

1 The Great Mountain Wall

The Himālayas which run in a south-east curve all along the northern front of India, and separate it from the plateau of Tibet, include several parallel ranges of lofty mountains, with deep vaileys between them. They cover a region about 1,500 miles long and 150 to 200 miles in breadth The Himālayas contain altogether about 114 peaks of over 20,000 feet, of which 75 exceed 24,000 feet. The best known are Everest or Gauri Sankar (29,140 feet), the highest mountain in the world, Kānchanjanghā (28,176 feet), Dhaulagiri (26,826 feet), Nanga Parbat (26,620 feet) and Nanda Devi (25,661 feet).

The Hindu Kush mountains which run from the Pāmirs in a south-westerly direction may be regarded as the natural boundary of India in the north-west, though considerable portions of the hilly regions to the south and east are now included in Afghānistān. Further south, the Safed Koh, Sulaimān and Khirthar mountains are now generally regarded as the north-western boundary of India, separating it from the Tableland of Irān But large stretches of land to the west of this line in modern Afghānistān and Baluchistān, like those to the south and east of the Hindu Kush, were for long both culturally and politically parts of India

Running roughly southwards from the eastern end of the Himālayas are a series of ranges which form the mountain wall separating India from Burma In the north are the Patkot Hills which broaden into the Nagā Hills and the Manipur Plateau and send out a branch westwards forming the Khāsī, Gāro and Jaintiā

hills. South of Manipur are the Lushai and Chin Hills, which narrow into a long single range, the Arakan Yoma, which reaches the sea at Cape Negrais.

These mountainous regions contain some high plateaus and valleys. Beginning from the west we have the plateaus of Baluchistān and Afghānistān which may be regarded as the continuation of the great plateau of Irān.

In these and the neighbouring hilly regions there are many secluded valleys which have been the home of sturdy tribes from time immemorial. They converted their high hills into so many impregnable citadels and maintained their independence even against powerful foes. The detailed accounts which we possess of the brave resistance which these small communities put up against such worldconquerors as Alexander or the Arabs form a brilliant chapter in the heroic annals of India

Coming next to the Himālayan region we have the famous Kāshmir Plateau, one of the most beautiful in the whole world. The green valley, at an elevation of 6,000 feet, is about 80 miles long and 25 miles broad. It is watered by the Jhelum river and is surrounded by snowy mountains 18,000 feet high. It has been justly regarded as "the earthly baradise".

Further east lies Nepāl, stretching for 500 miles along the timālayan region proper, which is above 5,000 feet, and the sub-Himālayan region below that height The latter may again be sub-divided into two parts The part near the Gangetic plain, known as the Terai, is very low and covered with marshes and coarse tall grass. The part near the mountains is covered with forest. Both are damp and unhealthy. The Nepāl valley proper covers a small area round its capital Kātmāndu It lies between the basins of the Gandak and Kosi and is watered by the Baghmatī river It is a rich fertile plain surrounded by high hills and although only about 25 miles long and 14 miles wide, nearly a quarter of all the inhabitants of Nepāl live in this valley.

The hilly regions of the east contain the plateau on which Shillong is situated. It juts westward from the main hills and separates the valley of the Brahmaputra on the north from that of the Surmā on the south. The main hill ranges running north to south contain small plains like those of Manipur.

The plateaus mentioned above have been, generally speaking, detached from the currents of life in the country proper The history of Käshmir, Nepāl, and Assam forms, therefore, almost isolated chapters in the history of India, and only very rarely comes into contact with it. Afghānistān, being on the main highway between India and the world outside, has however, played a more important part than would otherwise have been the case.

The mountains form an admirable defensive rampart of India

THE GEOGRAPHICAL BACKGROUND OF INDIAN HISTORY

against invasion by land. The Himālayas present a formidable barrier to an army, though small bodies of traders and missionaries can pass over it through difficult routes. The mountains in the north-east, though not an equally effective barrier, have for all practical purposes served India well. They are so steep and so densely forest-covered that to cross them is a task of abnormal difficulty, and no considerable body of foreigners is known to have passed through this route to the interior of the country.

The mountains in the north-west, however, have proved to be more vulnerable. There are several passes across the Hindu Kush and along almost all the chief rivers in this region, viz. the Swât and the Chitral running south, and the Kābul, the Kurram, the Tochi and the Gomal, running east to the Indus. But by far the most important route is the one that crosses the Hindu Kush through one of its passes, runs along the Kābul valley, and then descends to Peshāwar through the Khyber Pass, a winding and narrow defile about 20 miles long

Another well-known route runs, beyond the fringe of the Afghān mountains, from Herāt to Kandāhār, and then descends to the Indus valley through the Bolān Pass or the Mulā Pass further south

The third well-known route from the west followed the coastline and reached the Indus valley through the narrow gap between the Khirthar range and the sea But the inhospitable Makran coast made this route far less frequented than would otherwise have been the case

The two routes last mentioned were less important as gateways to India than the first For just beyond the region where they debouch into the Indian plain stretches the great desert of Rājputāna, which bars access to the interior of India. The Khyber route, on the other hand, leads directly across the plains of the Punjab to the interior through the narrow gap between the desert and the mountains Hence the northern route has been more frequently used by the foreign invaders of India This explains the strategical position of the Khyber pass as the first line of defence, and that of the narrow plains to the west of the Jumna. above Delhi, as the second.

Thus although the mountains around India have not definitely shut it off from the rest of Asia, they have made even peaceful communication with the neighbouring countries a difficult process Further, they have proved an almost insurmountable barrier against foreign invasion except through the Khyber Pass, which has been in all ages the gateway of India, and the key of its security from foreign aggression.

The Himālayas have not only served as a great barrier against outside intruders, but have also otherwise contributed to the welfare

of India. By protecting her against the cold dry winds from Tibet. and serving as a great screen for the monsoon winds, they have increased the fertility and prosperity of the Indo-Gangetic plains. The numerous rivers fed by the glaciers of the Himālayas have served the same end. Some of these rise behind the Himālavas, in a valley which forms part of the Tableland of Tibet. In the centre of this valley lies the lake Manasasarovara (Manasarowar), and near it rises the lofty mountain Kailasa, both famous in Indian mythology. Close to this spot, at a height of 16,000 feet, are the sources of the Indus and the Brahmaputra which run for a considerable distance, respectively, towards the west and the east, before they skirt round the edge of the Himālavas and take a southern bend to enter into the Indian plains The great Himālayan ranges are thus held "within the arms of the two mighty rivers whose southern bends form the western and eastern limits of the greatest mountain ranges in the world"

2 The Plain of Hindustan

Within the mountain-wall described above, and stretching from the Arabian Sea to the Bay of Bengal in a great curve, lies the great plain of Hindustân, nearly 2,000 miles long and 150 to 200 miles broad. It is formed by the basins of the three great rivers, the Indus, the Ganges and the Brahmaputra, and their various affluents and tributaries. Not a hill is to be seen in this vast area. The great rivers all rise in the Himälayas and are supplied perennially from the gradual melting of the snow and the rains on the hills. Many of these rivers wind through small shallow rocky beds in the hills for a considerable distance, but as soon as they reach the plains their course becomes slow over the flat valley, their beds are broadened, and not infrequently these are shifted, often over a considerable distance.

These rivers play a very important part in the life of the people Carrying sediment from the hills they have formed alluvial delta, often of considerable extent. Their perennial supply of water is an inexhaustible source of irrigation. Their long lazy courses through broad valleys have not only made the lands fertile but have provided good highways of communication. In consequence of all these, highly developed centres of culture and civilization have flourished on the banks of these rivers from remote antiquity.

The two principal river-systems are those of the Indus and the Ganges. The Indus rising in the Tibetan plateau runs west and north-west for nearly 800 miles between the great Karakoram range and the Himalayas Passing through a tremendous gorge beyond Skarda it is foined by the Gilgit river and turning south cuts its way through the mountains to the Plains. Five rivers, all originating from the Himalayas and winding through the blains

and eventually join to form the Panchanad (five rivers) or Punjab. These are, from west to east, the Jhelum, the Chenāb, the Rēwi, the Beās, and the Sultej. They have changed their courses even in historic times, and the last two formerly ran in parallel beds for a long distance below their present junction. These five rivers, combined, ultimately join the lndus. The Punjab province, covered by them, is a broad flat alluvial plain.

On leaving the Punjab plain the Indus flows through a narrocky gorge into a broad dry alluvial plain bounded by the Plateau of Baluchistān on the west and the great Thar desert in the east. The region of the lower Indus valley—the modern province of Sind—would have been a desert but for this river which irrigates and renders fertile a considerable portion of territory on both sides of it. The Indus is to Sind what the Nile is to Expret.

The Ganges issues from the Himālayas and has the character of a mountain torrent until it reaches Hardwar It then runs, first from north-west to south-east, then almost due east, and finally takes a southern course before it reaches the sea Its most important tributary is the Jumna on the west which, after a long parallel course, joins it near Allahabad. The tract between the two rivers is called the Ganges-Jumna Doab Some of the rivers issuing from the hills of the Central Indian plateau, such as the Chambal, the Kalı Sindh, the Betwa and the Ken fall into the Jumna, while the Son, further east, falls into the Ganges On the north the Ganges is fed by important tributaries issuing from the Himālavas, the chief among which are the Gumti, the Gogra, the Gandak and the Kosi. The Ganges falls into the sea through several mouths. The most important in ancient times was the westernmost called the Bhagirathi (the Hooghly) on which stand Murshidabad, Hooghly, and Calcutta. We can still trace some of its old beds like the Saraswati which was dried up in the 16th or 17th century. At present the main waters of the Ganges flow through the Padma, the easternmost mouth.

The mighty Brahmaputra, as noted above, has its source near the eastern base of the Kailāsa mountain. Under its Tibetan name of Tsan-po, it runs east for nearly 700 miles till it bends southwards and enters Indian territory under the name of Dihāng near Sadiya It is then joined by the Dibāng and the Luhit, and the united stream takes the name of Brahmaputra. In old days it was known as Lauhitya, the trace of which evidently survives in Luhit. The Brahmaputra "rolls in a vast sheet of water, broken by numerous islands" through a narrow valley, about 500 miles long and 50 miles wide, shut in between the Himālayas in the north and the Assam hills in the south It then passes through the plains of Bengal and joins the easternmost mouth of the Ganzes, viz. the Padmä Before the combined waters of the two fall into the see, they are joined

by other rivers from the eastern watershed between Bengal and Burma through the channels of the Meghnä, another mighty river. As a matter of fact, the last part of the course of these united rivers is now popularly known as Meghnä. The Ganges-Brahmaputra Doäb and the deltas formed by them constitute the rich fertile province of Bengal.

3. The Plateau

To the south of the plain of Hindustān lies the great plateau which stretches over the whole of Peninsular India, except the coaststrips, up to its southern extremity The plateau is divided into two important sections by ranges of mountains, which run across almost its whole breadth from east to west. These are the two parallel lines of hills, the Vindhyas in the north and the Sätpurā mountains, a little to the south, which are continued eastwards as Mahādeo hills and Makāl range, and pass into Chotā Nāgpur Plateau The Vindhya and Sātpurā mountains are separated by a narrow valley through which flows the great Narmadā (Narbada) river These hills with other outlying spurs and ranges constitute what may be called the Central Highlands, a formidable barrier which cuts off Northern India from the Deccan The portion of the plateau north of the Central belt of mountains is known as the Central Indian plateau, and that to its south, the Deccan plateau

(a) The Deccan Plateau—The surface of the Deccan plateau slopes down from the west to the east. The western edge of the tablelend forms a high precipice above the sea and is known as the Western Ghâts with a narrow plain between it and the sea. On the eastern edge, which is much lower, are the Eastern Ghâts, consisting of groups of low hills separated by wide gaps, through which the great rivers from the north and the west flow down to the coastal plain and then to the sea As we go southward the hills gradually recede from the sea leaving a coastal plain from 100 to 150 miles wide towards the east. Ultimately they take a sharp bend to the west and join the Western Ghâts at the Nilguris.

The crest of the Western Ghāts, exceeding 3,000 feet in height, forms a sort of protective barrier to the plateau which is consequently dry. The Western Ghāts are about 1,000 miles in length and throw out many spurs in the east across the Deccan plateau. The plateau is higher in the south, being about 2,000 feet in the region of Mysore and half that height in Hyderbäld. The southern point of the plateau is formed by the Nilgiri Hills where the Eastern and Western Ghāts meet. Bevond it are the Cardamom Hills which may be regarded as the continuation of the Western Ghāts.

Two major rivers in the Central Highlands, the Narmadā and the Tāpti, immediately to the north and south of the Satpurā range. flow from east to west. The rivers in Peninsular India, however,

THE GEOGRAPHICAL BACKGROUND OF INDIAN HISTORY

run from west to east. Many of them ruse in the Western Ghāts, only a few miles from the western sea-coast, but traverse the whole breadth of the plateau and cut their way through the Eastern Ghāta. These rivers are very different from those of Northern India. Being only fed by the monsoon rains, they become so dry in the hot season that they are hardly navigable even by small boats. In the absence of a constant supply of water they are also less valuable for irrigation purposes.

There are several important river-systems in the peninsula. The valley of the Godavari and its tributaries constitutes a large stretch of flat land in the north (in C.P.), but it is narrow in the south and there are dangerous rapids where the river cuts through the Eastern Ghâts. The valley of the Mahānadi also forms a broad plain (the Chattisgarh Plain) in the north-east, growing narrower as it passes through the Orissan hills to the sea

The Krishnä (Kıstna) and its tributaries, of which the chief is the Tungabhadrā, form another important river system which almost divides the Deccan plateau into two sections. This division is emphasized by the high Mysore plateau which lies immediately to the south. In the Mysore plateau rises the Kaverī, another large river, which with its tributaries forms an important river-system in the extreme south.

(b) The Coastal Region.—As noted above, there is a coastal plain on each side of the plateau. On the west a narrow low-lying strip stretches from the head of the Gulf of Cambay along the whole coast. Its northern part is now called the Konkan, and its southern the Malabar Coast As the full force of the monsoon winds strikes against the Western Ghäts the rainfall is heavy in this region and several small and short streams flow across it, but there are no big rivers. In Malabar these rivers form many back-waters along the coast, which facilitate easy communication by boat and favour the growth of a few fine harbours. There are some good harbours also in the northern Konkan.

There is a similar low-lying strip on the east stretching south from the delta of the Ganges. It is much wider than the western strip and its southern part, known as the Coromandel coast, is very broad. Unlike the western strip, again, it is traversed by many big rivers. In addition to the lower courses of the Mahānadi, the Godāvarī, the Krishnā and the Kāverī (Cauvery) mentioned above, a number of smaller streams flow across it. The deltas of these four rivers form an important feature in the economic geography of the eastern coast. The Deccan plateau is also more easily accessible from the eastern coastal plains than from the western, where the steep cliffs of the Ghāts rise abruptly from the plains to a great height. The eastern coast has few natural harbours,

but there are open roadsteads having easy communications with the interior.

The two coastal regions running for a thousand miles along the entire lengths of the eastern and western sides of the triangular plateau gradually approach each other as the Pennsula narrows down towards the south, and at last meet at Cape Comorin, the southernmost point of India. There is a small gap, about 20 miles bload, between the Nilgiri and the Cardamom hills, which provides an easy access from the western to the eastern coastal region, i.e. from the Malabar to the Coromandel coast. It is known as the Combatore or Paliphät gap.

To the south-east of Cape Comorin lies the slamd of Ceylon, which, though not an integral part, has been closely associated with India throughout the course of history. The Gulf of Manar which separates it from India narrows northward to Palk Strait which is so nearly closed in one part by a chain of islands and shoals that the name Adam's Bridge has been given to it. Ceylon is shaped like a mango and its area is a little less than that of Mysore. It is mountamous in the centre, sloping down to flat and broad low-lying coasts all around. There are a few good harbours on the coast and, as in Malabar, there are many backwaters along the seashors.

(c) The Central Indian Plateau.—Between the valleys of the Indus and the Ganges hes the vast Thar desert, which stretches almost up to the Aravalli range. The Punjab plain, south of the Sutley, rises gradually and fades away into this sandy waste, with bare rocky hills and waterless valleys. Beyond the Aravalli is the Central Indian Plateau which slopes gradually from the Central Highlands to the Gangetic plain, in the south, and ends in the east in the hilly and forested region of Chota Nagpur, which extends up to the plains of Bengal and Orissa. To the south lies the rich valley of the Narmadā, which rises in the Maikāl range and flowing almost due west, falls into the Gulf of Cambay.

The Vindhyas rise abruptly from the Narmadā valley like a high rocky wall, and seen from the south, look like a regular mountain range with short spurs. But they slope gently to the north, without any steep fall or well-marked spurs, forming the Mālwā plateau, the valleys of Eastern Rājputāna and the tablelands of Bundelkhand and Bāghelkhand. As noted above, all the rivers on this side flow into the Ganges or the Jumna.

The north-eastern outliers of the Vindhyas, such as the Bhanrer and Kaimur ranges, extend almost up to the Ganges south of Benares and then run parallel to this river, leaving only a narrow passage between them. till the Rājmahāl Hills Here a little beyond the modern Colgong, only a very narrow defile separates the mighty Ganges from the high cliffs of the Rājmahāl range stretching for about 80 miles to the south A little further to the east, beyond

the defile, the Ganges takes a sharp bend to the south and the hills gradually recede from its bank to the west of the wide plans of Bengal. This configuration of the land invested the long narrow passage between Chunār on the west and Teliāgarhi on the east with great strategic importance from the military point of view. This, the only high road between Western and Eastern India, could be effectively commanded by hill forts, and this explains the value of Rohtas, Chunār and, further west, of Kālinjar and Gwālior. Further east, the passes of Shāhābād and Teliāgarhi, separated by a distance of 3½ miles, served as the bottleneck through which every invading army had to pass, and this "gateway" served as an admirable defence for Bengal.

The hills and forests of the Central Indian plateau from Bundel-khand to Chota Nāgpur include many regions forming comparatively inaccessible retreats. They have given shelter to primitive tribes and enabled comparatively weaker peoples to defy the superior powers of the Indo-Gangetic plain. Thus the Central Indian plateau has profoundly influenced the history of India in many ways.

To the south of the desert and west of the plateau he the rich lowlands of Gujarat covered by numerous low hills and watered by the rivers Mahi, Sabarmati, and the lower courses of the Narmadā and the Tāpti This region includes the characteristic projection, known as the Kāthiāwār Peninsula, and the Rann of Cutch, immediately to the west of it, which is now a great marsh and almost dry in the hot weather (cf Ch. IV, § VII).

II INFLUENCE OF GEOGRAPHY UPON HISTORY

Like most other countries in the world the history of India has been profoundly influenced by its geographical features. These have been partly noted above and will be further evident as we gradually proceed with our historical narrative from age to age; but some general broad issues may be discussed here.

In the first place we must note the vast dimensions and the varied physical features of the country In extent India is almost equal to Europe with the exclusion of Russia. It contains the highest mountain ranges, lofty plateaus, extensive plains only slightly higher than the sea-level, sandy deserts, large rivers, fertile river-valleys and forests of all types and descriptions Every variety of climate from extreme cold to extreme heat is to be found in the country All these factors tended to separate India into different local zones, each with a regional spirit of its own Nevertheless India, being effectively shut off by mountains and seas from the other countries and forming a compact territory, developed as a distinctive political and cultural unit, as compared with the rest of the world The Indian horizon was a large but

limited one, and the common natural boundaries gradually led to a sense of a common motherland. The vision of a fundamental unity always loomed large and coloured the political ideals of the country. This ideal of political unity was rarely realized in actual practice but, as a political theory, it can be traced throughout the long course of Indian history. The cultural unity was, however, more manifest, being inspired by a common language, literature, and religious and social ideals. In spite of seeming diversity there was a large measure of cultural unity, and the goal of political union was never lost sight of. This unity in diversity is the keynote of the tangled history of India, and forms the background against which the seemingly complex developments in the various aspects of Indian civilization must be viewed.\footnote{1}

The natural barriers of hills and rivers largely determined the different political (and partly cultural) units into which India was divided. These natural divisions favoured the growth of a local and regional spirit and fostered separatist tendencies. The marked distinction between North India, the Deccan plateau and the peninsular plains to the south and east of the latter, led to the growth of three broad regions which maintained distinctive characteristics and generally played a separate rôle in politics throughout the long course of Indian history In each of these regions political unity was frequently achieved or attempted with a large measure of success. But the attainment of political unity between any two of these regions, even those to the north and south of the Krishna, was more difficult, and though there was almost a continuous struggle for achieving it, successful attempts were few and far between The unity of the Hindustan plains, together with the Central Indian plateau was rendered more difficult by the very large extent of the country It was, however, not infrequently realized, at least to a large extent, and the struggle for its achievement was a constant feature of the history of India But the occasions were, comparatively speaking, rare when a deliberate attempt was made to unite all the regions to the north and south of the Vindhyas

The political history of India, generally speaking, thus resolves itself into separate histories of the three regions. But the points of contact between them, though infrequent, were not altogether absent, and under powerful dynasties, in all periods of Indian history, a considerable part of each of the three regions was brought under a common sceptre.

The three regions also exhibit similar, though somewhat less prominent, distinctions in cultural history. While the Aryan language and cuvilization swept over the whole of Northern India obliterating almost all traces of the pre-existing state of things, its success was less phenomenal in the south. Over a considerable part of the Deccan plateau, and all over the South Indian Peninsula

to its south and east, the non-Aryan languages still prevail, and some older customs and ideas can yet be traced. On the other hand, these regions were profoundly affected by the civilization of the north. The primitive languages have accepted a considerable Aryan vocabulary, whereas religious and social ideas of the Aryans have almost completely transformed the old order of things.

Within each of the three natural divisions, again, there are sub-divisions caused by physical barriers, which have stood in the way of regional unity and affected the course of history. The great Thar desert, intervening between the plains of the Indus and the valley of the Ganges, has practically converted these two regions into separate units. This has been very unfortunate from the point of view of Indian defence. As noted above, the mountain passes through which foreigners could invade the country all converge on the Indus valley, and the bulk of the North Indian plains being separated from this region by the great desert, the resources of North India, far less the whole of India, could seldom be employed to guard these gateways. Moreover the desert, though effectively checking any aggression from the lower Indus region, permitted the invaders to bypass it through an opening on its north. The narrow plain above Delhi, bounded by the desert, the Jumna and the hills, was the bottleneck through which foreign invaders had to pass from the valley of the Indus to that of the Ganges.

This explains the strategic position of Delhi as an imperial capital and also how it is that the battle-fields of Pānipat, and others near it, have often decided the fate of India. But the foreign invaders had the great advantage of forcing the main gateway and getting a strong foothold in the country, before they had to reckon with the main strength of Indian defence. Illustration of this meets us at almost every step as we go through the history of the foreign conquests of India.

The Thar desert offers a great contrast to the fertile plains around it, but its peoples, though scanty, have imbibed from the soil a sturdy character and love of freedom which sharply distinguish them from their neighbours. The hills and forests have imparted a similar hardihood to the people and supplied means of defence which are lacking in the plains. Besides, these regions, less favoured by nature and more difficult of access, have afforded shelter to the wild primitive tribes who were dispossessed of their hearth and home in the fertile plains by the more civilized conquerors of the land. Thus it is in the desert and the fastnesses of the hills and forests of India that we still meet with the earlier strata of population like the Kols and Bhils who have maintained, almost intact, the primitive characteristics which distinguished them thousands of years ago. To these geographical factors also largely belongs the credit that certain regions have earned by successful

101

struggle for independence against heavy odds. The heroic struggle of the Rāpputs and the Marshias, for example, against the imperial powers of Delhi, was probably as much due to the nature of their lands as to the bravery of the people. To a less extent the strategic position of the Teliagarin passes explains the frequent rebellion of Bengal against the Ceatral authority of Delhi.

The extensive valley of the Ganges has been divided into several local regions by the large rivers, and the Indus valley, though comparatively smaller, is broadly divided into two by the middle and lower courses of the river. Thus in Northern India the modern provinces of the Punjah, Sind, U.P., Bihär, and Bengal, as well as the desert region of Räjputäna, the plains of Northern Gujara, plateaus of Malwä and Bundelkhand, and the isolated hilly tracts of Chotā Nägpur have the roots of their separate entities as distinct units dug deep into the past. No doubt racial and linguistic factors played some part in creating these natural regions, but no one can ignore the very large influence of the geographical factors, including the strategic means of defence afforded by nature.

The Deccan plateau was divided into several distinct regions by the two mighty rivers, the Godävarī and the Krishnā, and their tributaries; it was also separated from the coastal plans on the east and the west. The eastern coastal plan was divided by the Orissa hills and the estuaries of the two rivers named above. The region south of the plateau was sharply split into an eastern and western zone by the Nilgiris and Cardamom Hills, and the former was again subdivided, to a certain extent, by the Kaveri river. All these geographical regions had generally speaking developed into separate distinct units and retained their individuality through the ages.

Apart from these broad regional distinctions, even smaller barriers of hills and rivers have tended to keep alive the spirit of local autonomy in well-marked political units created by them. Not only in the vast Hindustan Plains and Central Indian plateau, but even in the comparatively narrower regions of the Deccan plateau and South Indian plains, we find the influence of such regional politics from time immemorial, with a surprising tenacity that has kept up the isolationist spirit even amidst political catastrophes and kaleidoscopic changes of rulers and dynasties. The old kingdoms of Kosala, Magadha, Gauda, Vanga Avantı, Lata, and Surashtra in the north, and Kalinga, Andhra, Maharashtra, Karnata, Chera Chola, and Pandya in the south, among others, seem to possess eternal lives Empires rose and fell, the whole country passed through a series of foreign invasions, but these states, under different names and various ruling dynasties, continued their individual existence almost throughout the course of history.

The popular view about the lack of political unity in India ignores the vastness of its area and the natural barriers that tend to separate its different regions. When we deplore political disunion in India we really view it on the footing of a comparatively small kingdom like Egypt, Assyria, Babylonia or Irân in the ancient world or a state in mediaeval or modern Europe. But we forget that there was not a single kingdom in any part of the world before the nineteenth century, of a size comparable to that of India, which maintained political unity tor a considerable length of time. On the other hand, the important kingdoms of India, such as Magadha, Kosala, Mālava, Chālukya, Chola etc. which, under varying names, have formed its constituent parts since remote antiquity, can well be compared with the single states in Asia and Europe, both in ancient and modern times. As in Asia and Europe, so in India, two or more of these kingdoms have often been politically united, and we have occasionally even mighty empires comprising most of them.

India is almost as large as Europe, excluding Russia, or the whole of Western Asia, and can no more be treated as a single political unit than any of them. The consolidation of large kingdoms was very difficult before modern scientific achievements eliminated the effects of distance and natural barriers, but these were important factors in old days, and operated more or less in the same way all over the world. India, as a consolidated united kingdom, is well within the range of practical politics today, when the whole country is closely knit together by a system of railways, and even two of the remotest regions of India are more familiar to each other than were two neighbouring provinces in the good old days. Now the news of a revolt in the most distant part of India would be conveyed instantly to its political centre, and a large force could reach the scene of disturbance in a few hours or a few days. But things were very different in the days of Asoka when the peoples of his frontiers such as those of Taxila (Punjab) and Suvarnagiri (Mysore) hardly knew each other. If we remember that the emperor would not receive the news of any disaffection in these places in less than a month, and many months would perhaps elapse before his army could reach there, we need hardly wonder that the Maurya empire did not last for more than 137 years.

A considerable part of Indian history is a chronucle of unsuccessful attempts to set up a stable empire over the whole or greater part of India, the impulse to which was partly caused by political ambition, but in part arose or received its strength from a common consciousness of the cultural and geographical unity of India.

The vast extent of the country, and its comparative seclusion from the rest of the world, had other important historical consequences. As noted above, it made India a distinct and self-sufficient geographical unit, almost a little world by itself. An Indian ruler or a military genius had enough scope for his political ambi-

tion or martial enterprises within the natural limits of the country, and so the comparatively unknown regions beyond the high hills or seas held out no temptation to him. The distances covered by the campaigns of the most famous military leaders in the ancient world, and the extent of territory conquered by the largest empirebuilders in ancient times, could well be comprised within the limits of India. A Chandragupta Maurya or a Samudra-gupta, not to mention lesser names, could quench his inordinate thirst for military glory without crossing the natural boundaries of India. It is only very rarely that rulers like Rajendra Chola overstepped them and carried arms beyond the seas or hills. Thus while foreign conquest is an important feature in the history of Egypt and many ancient kingdoms in Mesopotamia and Iran, it never figured as an important element in Indian polity. As a natural consequence of this, an Indian ruler would scarcely be expected ever to emulate the exploits of Thutmose III, Cyrus, Xerxes, or Alexander, and the vision of a Roman empire extending over three continents would be altogether out of place in Indian history. But at the same time, the conception of a distinct unity, as against the rest of the world, was promoted in India in a manner which was not to be seen in any part of the ancient world of equal magnitude.

The physical features of the country affected the lives and habits of the people. The valleys of the numerous rivers, specially the Indus, the Ganges, and their tributaries, offered easy means of communication and cheap livelihood. Hence their banks were studded with flourishing seats of civilization from very early times. The absence of keen struggle for existence gave opportunities for intellectual pursuits, and the wild beauty of nature favoured a speculative turn of mind and the development of philosophical ideas. But nature's bounty was unfavourable to the growth of physical hardihood or a tendency to scrutinise the mysteries of the physical world leading to a scientific spirit. This at least partly explains why art, therature, and philosophy flourished, but positive sciences made comparatively little progress in Indua.

The extensive coast-line of India fostered trade and maritime activity and made the Indians hardy mariners. From an early period they navigated the seas, both in the east as well as in the west, and their bold sea-faring exploits carried them to distant and unknown parts of the world.

The very narrow sea-board on the west was shut off from the interior by the precipitous Western Ghāts and hence flourishing seaports arose only on its northern and southern extremities. For they had to be sustained by constant supply of industrial products from the interior. As the gap between the Nilgiris and Cardamom Hills in South India offered an easy means of communication between the eastern and western coasts of the peninsula, we find a

THE GEOGRAPHICAL BACKGROUND OF INDIAN HISTORY

number of important harbours on the western coast in this neighbourhood.

The eastern sea-board contained important harbours near the mouths of the big rivers viz. the Ganges, Mahānadi, Godāvarī, Krishnā, and Kāverī, as they were important channels of communication with the mterior The Ganges being the only outlet to the sea for the extensive and populous regions in Northern India, the ports at its mouths became flourishing centres of trade.

The trade gave impetus to colonization and Indian colonies were planted even in the most distant regions in the Far East. The maritime activities of India were, however, almost solely devoted to peaceful pursuits. This is mainly due to the vast expanse of the sea on both sides of the peninsula. The direct voyage between the Indian coast and the opposite shore, either of Africa on the west or Indo-China and the East Indies in the east, was long and risky. The Indian rulers having enough scope for military enterprise and imperial ambition in the mainland itself, the dubious chances of success afforded by the sea could scarcely tempt them to devote their energy and resources to building a powerful navy in order to establish an oversease sempire.

Only one Indian power, the Cholas, attempted such a bold enterprise after having acquired possession of almost the whole length of the eastern sea-board. But in spite of brilliant success in the beginning, it proved too heavy a burden and had to be abandoned. If India had the advantage, like Greece or Rome, of having a narrow sea with islands and mainland beyond it within easy reach, she might have developed into a naval power as did many of her colonies in Malaya and Indo-China, regions which offered these facilities.

Indian colonization was therefore the result of private individual enterprise, and not due to military conquest or an organized undertaking backed up by the State No colony was the result of a single mass migration sent forth by an Indian ruler to relieve congestion or to expand his dominions Sporadic settlements and gradual infiltration by bold Indians, who left home for various reasons and at different times, slowly built up these colonies, and consequently they had no political tie or even intimate association with the mother country. But they proved to be the milestones in the triumphant progress of Indian culture across a vast region Had these colonies been within easy reach of India she might have built up a colonial empire such as the Greeks and Romans had done. But geographical factors determined the character of Indian colonization. It was to be a means to cultural conquest rather than political aggrandizement, of commercial enterprise rather than economic exploitation.

This brief review has sufficiently demonstrated the profound

influence which geography has exercised upon the history of India. It is easy, but not necessary, to dwell upon many other particulars, for these will be evident as we proceed with our historical narrative.

In conclusion we must consider the effect of climate on the history of India. It is generally assumed that the tropical climate has enervated the people of India and mainly accounts for their failure to check the hardy mountaineers from colder regions, less favoured by nature, who were tempted to their country by its wealth and fertility. It has been regarded as an irony of fate that the agreeable climate and the vast plains watered by rivers, which have been the source of India's wealth and happiness, have also proved to be the main causes of her ruin by making their inhabitants fond of ease and luxury, devoted to the ideals and pursuits of peace, and less hardy and persevering than their opponents schooled in the hardship of nature.

On the other hand, it has been pointed out that at least a considerable section of the Indians have been always noted for their prowess and bravery, that the Rājputs, Marāthās and Sikhs in modern times have not proved less hardv than any other peoples and that the defeat of the Indians at the hands of the Western invaders cannot be ascribed solely or even mainly to the influence of climate. The facts of history seem to uphold this contention, as on a careful consideration of the details of the various campaigns, so far known, it would be difficult to maintain that the discomfiture of the Indians is to be attributed exclusively or even mainly to their lack of physical strength

It is however, a singular fact worth noting, that in the numerous recorded instances of the foreign invasions from the West, the Indians have almost always been defeated by the new-comers. This can hardly be regarded as a pure accident. Nor can it be explained away by a lack of unity among the defenders, for the invaders did not always possess a numerical superiority over their opponents.

The true explanation seems to lie in India's ignorance of the outside world The rise of political powers or new political combinations, the evolution of military textics, and the invention of new military weapons or fresh equipment, even in Central or Western Asia, not to speak of remoter countries, hardly ever interested India, though, as events proved, she fell a constant victim to one or other of them. The details of the defensive campaigns waged by Indian rulers leave no doubt that they were either unaware of the innending danger, and consequently not sufficiently prepared, or were outmatched by the new military formations or weapons to which they were complete strangers. The charge of a compact and well-disciplined cavalry force, held in reserve, has often proved

THE GEOGRAPHICAL BACKGROUND OF INDIAN HISTORY

decisive against the mass of elephants and infantry of the Indians, and yet they have never learnt the value of cavalry or the strategic importance of a reserve force. It may be noted as a typical instance that the Indian opponents of Bäbur were ignorant of the fire-arms which the latter used with such dreadful effect

The reason for such ignorance is not merely to be sought in a spirit of isolation fostered by almost insurmountable barriers. It is also partly due to the fact that, for reasons stated above, Indian rulers had no occasion or temptation to carry on campaigns outside India They lived and fought in their little world, vast enough for their personal ambitions and enterprises, and cared little for what was happening in the outside world.

Unfortunately, the physical barriers which shut off the vision of Indian rulers from the outside world were not strong or powerful enough to keep out all foreign invaders from Indian soil. When some of them did cross the barriers into India, they brought with them new ideas and forces of a progressive world with which India could not cope. But so strongly did the geographical factor operate that as soon as these foreign invaders settled in India, they imbied the insular spirit so congenial to her soil, and themselves fell victims to it. So it has been in the past, and so it is destined to be in the future, so long as the political vision of India confines itself within her natural boundaries of hills and seas, and does not look bewond to the world outside.

¹ It would be wrong to think, as many do, that the conception of the fundamental unity of India is only of recent growth. This idea can be traced to ancient periods by the use of the common name, Bhārafavarsha, for the whole country, and the designation Bhārafā Sanatal, applied to the people of India This we read in the foreignation Bhārafā Sanatal, applied to the people of India This we read in the to the south of Himadia is called Bhārafa-varsha (land of Bharafa), for there live the descendant of Bharafa (Bhārafa-varsha (land of Bharafa) for the political unity of India appears from references to "thousand Yopama (Issue) of land that circle from the Himadiaya to the sea as the Yopama (Issue) of land that circle from the Himadiaya to the sea as the Brahampatir of Factorio Cocan) to the even mouths of the India; (or Western Ocean) As regards cultural unity, the findspots of Ašoka's records prove that one language and one serint were used, or at least understood, by common people all over India in the hirt been a common bond of culture in addition to religious and associal ideas and mattitutions.

CHAPTER VI

FLORA AND FAUNA

I. THE FLORA

The vegetation of a country depends on, and to a large extent is determined by, its geographical and climatic features, and India stands in a very favourable position with respect to both these conditions.

"There is no part of the world better marked off by nature as a regnon by itself than India. It is a region indeed full of contrast in physical features and in climate." The extraordinary varieties in its physical features have been described above. The climate also varies from "torrid to arctic, from almost absolute aridity to a maximum of humidity." It is greatly influenced by the monsoon winds and the distribution and orientation of the mountain ranges and their altitude. The annual rainfall varies prodigiously in different parts of India from 450 inches in the Khāsi Hills of Assam to about three inches in the deserts of Sind and Rājputāna. Its temperature also shows enormous variation with the changes of seasons At some places during summer months it records 130 degrees or more in the shade and in winter it goes down many degrees below freezing point.

The soils of India, like its climate, comprise almost all the different types found elsewhere in the world. The alluvial soils of Assam, Bengal, the United Provinces, the Punjab, Rajputana, Sind, Gujarāt, the Godāvarī, Krishnā and Tanjore districts of Madras and the eastern and western coastlands of the Deccan, are important for agricultural crops and have made India essentially an agricultural country. The Deccan trap and the regur or black cotton soils of the greater portion of the Bombay Presidency, Berär, western parts of the Central Provinces and Hyderabad, in the valleys of the Tapti, Godavarī. Narmadā, Krishnā and parts of Kāthiāwār and the western portion of Central India, are very favourable to the cultivation of cotton lower (great millet), wheat, linseed and gram The crystalline and laterite (red) soils of Madras, Mysore, the southeast portion of the Bombay Presidency, the eastern half of Hyderābād, parts of the Central Provinces, Orissa, Chotā Nāgpur, western borderland of Bengal, parts of eastern Rajputana and the Bundelkhand region of Central India are fertile when dark coloured, and infertile when they are light coloured and sandy

India's contiguity to bordering countries has been responsible for the migration of a large number of plants from China, Tibet, Siberia, Malaya, Europe and South Africa, and they form the exotic

FLORA AND FAUNA

elements of the flora of India. The number of recorded species of flowering plants comes to about 17,000 under 176 families, and there are about 600 ferns and fern allies, 3,000 moses and 178 liverworts According to Chatterjee, 38 per cent of the flowering plants of India are exotic.

From their exhaustive and critical studies of the Indian flora Hooker and Thomson observe that "India contains representatives of almost every natural family on the globe. and it contains a more general and complete illustration of the genera of the other parts of the world than any other country whatsoever of the equal or even of considerably larger extent."

India is so extensive and varied a country that for a closer study of its vegetation it has been necessary to divide it into three botanical areas and six provinces. The three areas or regions are the Himālayan, Eastern, and Western The Himālayan represents a "rich tropical, temperate and alpine flora with forests of conifers, oaks, rhododendrons, and a profusion of orchids"; the Eastern, "a few comfers, many oaks and palms with a great preponderance of orchids"; and the Western "has only one comfer, no oaks, few palms and comparatively few orchids" The Himālayan flora has in common many European genera; the Eastern, many Chinese and Malayan; and the Western. European, Oriental and African.

These three botanical oreas are subdivided into six botanical provinces, based on their climate and physical characters, namely (1) the Eastern Himâlaya (2) the Western Himâlaya, (3) the Indus Plain, (4) the Gangetic Plain including the Sunderbans, (5) Malabar, and (6) the Deccan, each characterized by its own flox

It would be beyond the scope of this chapter to go into details of the vegetation of these provinces but in order to give an idea of the immensity of India's vegetable wealth a brief enumeration of the principal types of vegetation is given below.

1. Forest Vegetation: its types

India is very rich in forests, as a matter of fact forests cover more than one-fifth of its total area. The forests of India supply valuable timber, firewood, essential oils, resin, turpentine, lac, dyeing material, tanning material, myrobalans, sources of paper pulp and other materials of commerce and industry.

According to the variation in climate, altitude and habitat the forest vegetation of India is divided into five types (1) the Evergreen, (2) the Deciduous, (3) the Dry, (4) the Hill, and (5) the Tidal or Littoral.

The Evergreen.—The dense and luxuriant Evergreen flourishes where the annual rainfall is over 80 inches and contains trees of many important families, such as the Dipterocarpaceae, Guttiferae, Annonaceae. Meliaceae, Burseraceae, Sapotaceae, Euphorbiaceae.

and the Palmae. They include many species of great economic value, such as ebony, teak, rosewood, ironwood, bamboos, the jaman, the neem, and tamarind. In the Carnatic Evergreens the families Ebenaceae, Sapotaceae, Capparidaceae, Rhamnaceae and Myrtaceae predominate.

The sea-shores are skirted with coconuts; the villages are surrounded with groves of betelnuts and talipots; cassia, pepper and cardamom flourish wild in the jungles and form staple products of export Sandalwood is found in the outskirts of Malabar. Nutmeg, coffee, and tea grow in the hill slopes, and cinnamon flourishes in this region. Artocarpus, calophyllum, cedrela, dalbergia, dipterocarpus, and others occur in plenty. In Assam forests bamboos, palms, ficus, cycas, ferns, and others grow in abundance

The Deciduous—The Deciduous occupies the larger part of the Deccan and is also known as the Monsoon Forests. Trees are large-sized and form very remarkable timbers, such as teak, sāl. padauk, redwood. sandalwood. anjan. species of Terminalia, Chloroxyllon, Sucietania, Dospyros, Acacia, Albizzia, and others. Of palms, Phoenix sylvestris and Borassus fabellifer grow gregariously The chief bamboos are Bambiva arundinacca and Dendrocalomus strictus; ferns and their allies are rare in these forests

The Dry.—The Dry forests are found in the desert regions of Sind, Rājputāna, and the Punjab, and the plants are characterized by thick and fleshy stems and leaves and mostly consist of thickets of shrubs and a few stunted trees; many of them are leafless. The chief families are the Leguminosae. Tamaricaceae, Rhammaceae, and the characteristic trees are the Jhand, various species of Tamariz. Capparis, Salvadora. Acacia, Phoenix sylvestris, Zizyphus, etc.

The Hill .-- The Mountain or Hill forests are found in South India above 5 000 feet and in the Himālavas above 3.000 feet altitude. The trees are Evergreen, of which the following are the most conspicuous oak, picea, deodar pines, firs, chestnut, walnut, maple, elm. ash, birches, laurels, pyrus, poplar, rhododendron, and species of abies. The prominent families of these forests are the Coniferae, Cupuliferae, Sapindaceae, Lauraceae, Magnoliaceae, Salicaceae and Urticaceae Indian Bladder-nut and Lilac, Rosa webbiana, moschata, and eglanteria, Parrottia sp., the mountain ash. the bullace and the common hawthorn are neculiar to the Western Himālayas Species of magnolia, musa, palms, pandanus, bamboos, orchids, cycas and ferns abound in the Eastern Himālavas. Beautiful herbaceous plants like anemone, aconites, violets, primulas and balsams abound The alpine zones contain species of rhododendron, junipers and associations of dwarfish herbaceous plants, such as species of Rheum, Arenaria, and Saussarea. Both in the Eastern and Western Himālayas about 4.000 flowering species under

FLORA AND FAUNA

147-160 families, 230-250 ferns and their allies with eight tree ferns have so far been recorded.

The Littoral.—The Littoral forests are found in the deltas of the Ganges, the Mahānadi, and the Indus, and also to some extent in the regions washed by the high tide and salt water. They are rich sources of fuel. The whole of the Sunderbans is named after the Sundri (Herthera) trees. The promnent families of these forests are: Rhizophoraceae, Gramineae, Cyperaceae, Typhaceae, Euphorbiaceae, Verbanaceae and the two palms, namely, Nipa fructars and Phoenix paludosa. In many places Avicemna, Nipa, and Aegialitis form associations; Suaeda maritima, Acanthus ilicifolius, Sonneratia apetala, Ceriops roxburghiana, Bruguuera gymnorhiza, Aegueros major, and others are some of the dominant species of these regions These forests are popularly known as the Mangrove Forests

2 Freshwater Vegetation

About 160 flowering species form the common water or marsh vegetation of India. The beautiful white, blue, and red water libra and their allies, the magnificent white and red lotuses, Euryale ferox. a relative of the Victoria regia, and Lumnanthemum with clusters of white flowers lend charm and beauty to the fresh water lakes, pools, ponds, and other inland waters Nymphoea alba, Caltha, and others occur in the lakes of Käshmir. Species of Lemna, Wolfia, and Ceratophyllum are conspicuous free floating aquatic plants, while water-chestnut. Ipomoea sp, waterferns, and many others are amphibious. Vallisneria, Hydrilla, Ottelia, Najas, Chara, etc., form extensive floor vegetation in shallow water-courses. The Podostemonads are regarded as the most remarkable of India's freshwater floor in the rapid streams of hill slopes

3 Cultivated Vegetation

An account of the vegetation of India will be incomplete with out some notice of the large varieties of her cultivated vegetation As India extends, both horizontally and altitudinally, from the tropical to the temperate zones, cultivated crops of these zones all over the globe are being, or can be, grown successfully in India. Crop vegetation in India, as in other countries, is distinguished into four general types, namely (1) the Hull, (2) the Wet (Monsoon), (3) the Dry (Winter) and (4) the Irrigational

The total area of cultivable land in India is about 450 million acres, and of these nearly 285 million acres are actually under cultivation. The following is a bare account of the principal crops and their distribution in India. These are classified under six

major heads, namely: (1) the Cereals, (2) the Pulses, (3) Sugarcane, (4) Oil seeds, (5) Fibre crops, and (6) Plantation crops.

Cereals.—The cereals comprise rice, wheat, millet, barley, and maize, the first two being the principal cereal crops.

Rice is cultivated in Bengal, Madras, Bihār, the United Provances, Orissa, the Central Provinces, Assam, Bombay, and Sind,
and covers about 70 million acres. Wheat is grown in about 35
million acres, and the principal wheat-growing provinces of India
are the Punjab, the United Provinces, and the North-West Frontier
Province. Millet is extensively grown in Madras, Bombay and part
of Hyderābād. There are two principal kinds. jowar (Andropogon
sorghum) and bajra (Pennisetum typhoideum), and the total area
under millet cultivation comes to about 63 million acres. Barley is
grown only over a comparatively small area in the Ganges basin
of the United Provinces, Bhār, Peshāwar, and Central Kashmīr.
Maize in small quantities is cultivated more or less all over India
but in large quantities in the United Provinces, Bihār, Nepāl, and
the Punisab both in the balans and hills

Pulses—This important group includes gram, lentils, peas, arhar, and many species of Phaseolus, and the total area under cultivation approximates to 50 million acres of which gram alone occupies between 15-17 million acres Gram is mostly grown in the Punjab, the United Provinces, Bihār, the Central Provinces, Bombay, Hyderābād, and Mysore; lentils in the Central Provinces, Madras, and the United Provinces, and peas and other pulses in many parts of India

Sugar-cane —India is regarded as the original home of sugarcane and the present area under its cultivation exceeds four million acres The most important sugar-cane growing provinces are the United Provinces, the Punjab, Madras, Bengal, Bihār, and Bombay

Oil Seeds—The importance of oil seeds is very great Not only do they constitute an essential element in the dict of every Indian, but they are also in great demand for the manufacture of vegetable ghee, perfumeries, varnishes, paints lubricants, candles soaps, and other similar products of commerce The principally including crops of India are rape and mustard, ground-nuts, linseed, eastor-seed, sesamum seed, etc.

The cultivation of rape and mustard is confined to the northern parts of India, in the United Provinces, Bengal, the Punjab, Bihār, and Orissa over an area of about six million acres. Ground-nut is grown over eight million acres chiefly in Madras, Bombay, Hyderābād, the Central Provinces, and Chotā Nāgpur. The area under linsseed crop is about three and a half million acres distributed over the Central Provinces, Bihār, Orissa, the United Provinces, Bombay, Bengal, Hyderabād, and the Punjab. Sesamum is grown in almost all the provinces of India, but mainly in Bombay, Madras,

FLORA AND FAUNA

and the Central Provinces. Castor oil plants as a principal crop are grown in Madras, Hyderābād, Bombay, and the Central Provinces. Coconut oil is derived from the copra of coconuts,

Fibre Crops.—Cotton, jute, and hemp are the principal fibre crops of India. Of these, cotton occupies 25-27 million acres, jute 2.18 million, and hemp 0.6 million acres. Cotton is a dry-region crop and is grown in Bombay, the Central Provinces, Berär, the Punjab, Madras, the United Provinces, Bengal, Hyderabåd, Baroda, Rájpuidina, Sind, and Mysore. Jute cultivation is restricted to Bengal, Assam, Bihár, and Orissa. Two varieties of Hemp, the Sunn and the Roselle, are grown in Bombay, the Central Provinces, the United Provinces, and Madras, and to a small extent in the North-Western Himālavas and Sind

Plantation Crops.-The principal plantation crops are: tea, coffee, tobacco, rubber, indigo, opium-poppy, condiments and spices, fruits and vegetables including root crops. The area under tea cultivation in India is about 0.82 million acres in the hill slopes of Assam, Bengal, Bihar, Madras, the Punjab, the United Provinces, Cochin, Mysore and Travancore Coffee cultivation is restricted mainly to Mysore, Madras, Coorg, Cochin, and Travancore, the total area under coffee being about 0.2 million acres. Tobacco was first introduced to India in 1508, and the best tobacco is now grown over 11 million acres in Bihar, Bengal, Madras, Mysore, Bombay, the Punjab, and Hyderābād. Rubber is mainly grown in Travancore, Madras, Coorg, Cochin, and Mysore. Indigo cultivation is confined to the Ganges valley, and Opium-poppy in Bihar and the United Provinces. Condiments and spices are grown mostly in South India and Assam over an area of 2 million acres. India's fruits and vegetables, including root crops, cover an area approximately of 4 5 million acres and include grapes, oranges, apricots, pears, apples, bananas, mangoes, litchis, pine-apples, papaya, guava, water melons, and others. The coconuts provide delicious drinks and nutritious food, and are a source of copra and coir.

Before concluding this brief account of Indian vegetation, specific mention should be made of three trees which have figured in Indian vegetable-lore and literature since Vedic times: the banyan (Ficus bengalensis), the pipal (Ficus religiosa), and the śalmali (Bombaz malabaricum). The banyan with its spreading branches and prop roots, the pipal with its wealth of hanging leaves constantly fluttering in the wind, and the towering śalmali, a blaze of scarlet flowers in early spring are distinctive features of the Indian landscape.

2. THE FAUNA

On account of the great diversity of climatic and physical conditions in a vast country like India its animal life is so remarkably

varied and abundant that it is beyond the scope of the present chapter to give even a general account of the characteristic features of its fauna. We therefore propose to confine our attention mainly to the vertebrate animals; for though the invertebrates are far greater in number and variety the vertebrates are better known and more beneficial.

1. The Vertebrates

Amongst vertebrates, the mammals constitute the highest group and are of special interest as these include man himself. In India, mammals are well represented. Only the duckbill and spiny antesters and the pouched mammals such as kangaroos and the opossium do not occur in India. Amongst the man-like apes only the hoolock gibbon is found in India. This occurs in large troops in the dense forests of Assam and adjacent areas. The monkeys are represented by a number of species and include the langurs or hanuman monkeys, which have become famous by being connected with the story of the Hindu epic—the Rāmāyana. These occur practically over the whoie of India. The lemurs in India are represented by the slow lors occurring in the forests of Assam and the slender loris living in the forests of South India.

The various groups of land carnivores are well represented in india. Most of them, particularly the larger ones, constitute the big game for hunting. Amongst these, the Indian lions are at present restricted to the forests of Kāthiāwār peninsula. The tigers are widely distributed throughout India—in the snowy Himālayas, in the evergreen forests and dry open jungles as well as in swamps of the Sunderbans. The panther or the common Indian leopard, the beautiful Himālayan snow leopard, the skin of which is in great demand in the fur trade, and the cheetah or the hunting leopard are the other large carnivores.

The smaller carnivores of the cat-group include, besides the various forms of cats, the civets, the mongooses, and the hyaenas. The other carnivores include the wolves, jackals, wild dogs, foxes, as well as the bears, weasels, and otters.

The hoofed mammals constitute an important group of animals. Because of the immense usefulness of many a member of this group, these play an important part in the economic life of human beings. The hoofed forms are either even-toed or odd-toed. The odd-toed forms are the horse and ass, the rhinoceros and the elephant. Rhinoceros in India is represented at the present day by the single race of one-horned forms, which is now restricted to Assam and the swamps and grassy jungles of low hills in parts of Nepäl. The elephants and the horses are both notable for the part they played in the numerous bettles fought on Indian soil in the early days of history. The even-toed forms include the cattle, sheep and goats,

FLORA AND FAUNA

deer, gazelle and antelopes, and the boars and pigs. The cattle in India include, besides domestic forms, the bison and the wild buffalo.

The sheep and the goats are chiefly Himalayan. The goats include the Himalayan form-the Asiatic ibex and the Nilgiri wild goat or the South Indian ibex. The several races of deer found in India live in more or less thick jungles. These include the barking-deer, the barasingha or swamp-deer, the sambar, the spotted-deer or chital and the hog-deer. Another race found in the high altitudes of the Himalayas is the hornless dark brown musk-deer. The male of this race bears beneath the skin of the abdomen a gland. the secretion of which is known as musk, reputed for its various uses especially for medicinal purposes. The mouse-deer or the Indian chevrotain is another hornless race of very small size. The black buck, the only representative in India of antelope, has beautiful spirally-twisted horns. The Nilgai is an inhabitant of open torests whereas the four-horned chousingha lives in the forests in the hilly tracts of peninsular India. The chinkara or Indian gazelle lives in the deserts whereas the pigmy-hog occurs in the forests of Eastern Himālayas. Pig-sticking or spearing wild hog from horseback is a favourite sport in India.

The insectivores include tree-shrews, hedgehogs, moles, and shrews. The rodents include the squirrels and marmots, jerboas, rats and mice, porcupines and hares.

The scaly ant-eater or Pangolin is common in India.

The bats include chiefly the large frugivorous flying foxes and the small insectivorous bats.

The whales and dugongs are marine animals and are occasionally found near the Indian coasts. The dolphin and the porpoise occur in the rivers.

The burd life of India has attracted considerable interest due to its remarkable variety and wide range of distribution. The distribution of birds in India is not, however, homogeneous. Migration of birds is a well-known fact, but in India the migratory birds are few in number and the few that migrate into the Indian region come from the north only

The familiar birds which are commonly found around human habitations include the crows, the house maynā, and the house sparrow. The crows include the common house crow and the jungle crow. The ravens are larger in size than the jungle crows. The jackaws and rooks found in Käshmir and parts of north-west India are winter visitors from the northern region. The jackdaw has a musical and melodious call and it makes a delightful pet. Of the various maynās found in India the house maynā shares with the crow the distinction of being the most familiar and best known bird.

The magnes are beautifully coloured birds usually living in forests. These birds are very noisy and their call is harsh and unpleasant. Tits are small birds inhabiting chiefly the forests. The babbiers and thrushes are gregarious birds feeding on the ground. They are noisy chatterers par excellence. Warblers are small birds usually living in open grassy tracts or sandy ground. The redvented bulbui is a common garden bird throughout India. It is reputed for its cheeriul call notes. The well-known Indian robin is the dayat, one of the best songsters. The shama is another famous singing bird of India. The familiar pleasant call notes of pee-ou-a produced by the golden or tole or the mango-bird in the mango season are heard in gardens as well as in forests both at dawn and at sunset. There are many fly-catchers, which are usually small birds. Another familiar bird is the king crow which is frequently found to chase crows. It is a common sight to find this bird perching on telegraph wires beside the railway lines. The weaver birds are noted for the curious flask-shaped nests they make. Tailor hirds are well-known for their habit of sewing two leaves together with a piece of grass as a receptacle for their nests. Munias are smaller birds than the robins and are familiar cage birds. Besides the parrots with green plumage and long tails which are well-known as cage birds throughout India, the hill maynā is a notable cage bird with wonderful powers of imitating the human voice. Swallows and larks are usually winter visitors. These generally sing while on the wing. The woodpecker is a familiar bird in India. It has a long beak with the repeated strokes of which it removes bark and rotten wood from tree trunks exposing termites, ants, beetles and their larvae on which it feeds. Amongst the barbets which are usually grass green in colour and frugivorous in habit, the most familiar form is the Indian coppersmith found in most Indian gardens and is known by its repeated metallic call like the tap of a small hammer on metal in a monotonous manner for some minutes Some of the buntings which are common in winter are notorious for causing damage in cornfields. The blue jay or roller is one of the best known Indian birds seen in gardens and orchards With the end of winter it rolls in the air and with harsh screams declares the advent of the spring.

The kingfisher represents another group of common Indian birds. This has a beautifully coloured plumage. The hornbill is a forest bird with a broad casque over the large curved beak. It is reputed to be the Garuda of the Hindus. The hoopoe is found throughout Indua and is noted for its loud hoots repeated two or three times. The common Indian swifts are famous as producers of edible nests. The nightjars are well-known for their peculiar notes in the earlier and later parts of the night resembling the strokes of a hammer on a plank. They are considered of evil omen

FLORA AND FAUNA

The cuckoos include several forms and all lay their eggs in the nests of other birds. The call of the common Indian cuckoo is described as bout-kou-ko. The hawk cuckoo, commonly known as the brain-fever bird, is reputed for its monotonous call notes in the hot season, each repeated note being higher in the scale. The Indian koel is another familiar bird, frugivorous in habit and commonly found from March to July. Its call consisting of two syllables is familiar to everyone in India. The male is glossy black and the female brown and spotted. Koel lays eggs in the nests of the crows.

The owls are all nocturnal in habit. They feed on various small animals particularly the squirrels, rats, and mice which cause damage to crops and are therefore greatly beneficial to agriculture. It is probably for this reason that the owl is associated with Lakshmi—the goddess of wealth.

Indian birds of prey include the vultures, the different forms of cagle, the various kites, the falcons, the hawks, the sikra, the buzzard, etc, usually birds of larger sizes.

The pigeons, including the Blue Rock pigeon and the doves, are common throughout India whereas the sand grouse is common in open sandy tracts feeding on the ground.

The game birds in India include a variety of forms. Those living on land include the pea and jungle fowls, the pheasants, partridges, quails, etc The pea fowls are famous for their splendidly coloured plumage and peculiar habit of being noisy at the approach of rain. The red jungle fowl is essentially a forest bird and is regarded as the ancestor of all domesticated poultry. The common quail is well-known as a bird for sport, a favourite delicacy for the table and a cage bird for fighting. The common grey partridges are usually captured with decoy birds and are favourite cage birds. Morning and evening the wild ringing notes of tit-ee-roo of these birds are amongst the familiar bird sounds of India.

Of the aquatic game birds the moorhen is widely distributed Another one is the familiar water cock or Kora. This is often tamed for fighting Others include the Jacana and the snipes

Amongst the cranes, the well-known form is the Sarus crane
The gulls are generally found in sea coasts but also occur along with
the terns about inland waters The spotted-billed pelican is purely
a water bird seldom seen on land Other familiar aquatic birds
are the common cormorants and the snake birds. The brown
dipper is an aquatic bird characteristic of the hill streams of the
Himālayas

Ibises, storks, herons, and spoonbills constitute a well-known group of Indian birds

Other notable birds living about well-watered regions include the ducks, the pochard, and the grebes The Brahminy ducks commonly known as chakha and chakhi are found in pairs

Reptiles.—The crocodiles and the snakes are the most notable animals amongst the reptiles, which also include the lizards, and the tortoises and turtles. The crocodiles which are of particular interest as attacking human beings are represented by the freshwater broad-snouted form known as the mugger and by the estuarme crocodile. Crocodiles are often hunted for their skin which istense a high price. Besides these, one finds the gharial—a purely lish-eating river crocodile.

The forms of land tortoises in India are lew in number. The shells of these are prettily marked. The Ireshwater tortoises are herovorous and ecinie. Of the turtles, the Ireshwater torms are carmivorous and aggressive. The carapace in these is covered by a soft skin.

The uzards in India are remarkably numeious. These include geckos, chameleons, skinks, momitors, etc. The chameleons are common in the forest region of pennisular India. These are well known for their capacity to change colour. The skin of the monitor of varanus is in great demand and there is a considerable trade in varanus skin.

The snakes in India have attracted much attention because of the large number of deaths amongst human beings and domesticated animals caused by bites of poisonous ones. India is the only country in the world where almost all the forms of known snakes occur. The worm-like subterranean typhlops are the smallest known snakes The largest living snakes found in India are the pythons and boas. The common non-poisonous snakes are the rat snakes or dhaman, the carpet snakes, the grass snakes, and the water snakes. Amongst the venomous snakes in India the commonest form is the cobra with the hood unmarked or marked either with a single large ocellus or with two ocelli connected together by a curved line. There is also a black variety of cobra. Another deadly poisonous snake is the krait. This includes the banded ones with alternate bands of black and vellow. The large-sized king cobra is known to be extremely fierce and aggressive. The other poisonous snakes in India are the various forms of vipers. These have broad flat heads and are without hoods.

Amongst the snakes two forms deserve special mentuon. The tree or whip snake is a beautiful slender snake usually of green colour frequently seen in trees, bushes, and creepers twined round the stems. Another one is the beautifully coloured kalnagini. Though its name implies its deadly venomous character, it is in fact a non-poisonous snake and is frequently reared as a favourite pet. The so-called double-headed snake carried by snake charmers has a blunt tail which is occasionally manipulated and furnished with glass eyes to assist in the delusion.

The Batrachians.—The frogs and toads representing the tailless

FLORA AND FAUNA

batrachians are common throughout India in ponds, streams, and all damp places. Of the tailed batrachians only the Indian salamander is round in India. The apogous forms include the worm-like burrowers.

I times.—India is remarkable for its abundant fish fauna which accounts for the large section of its population depending on hishes as the staple protein diet. The inshes exhibit a considerable diversity in their structure and habits due to the great variety of nanitatis in winch they live. Besides living in inland rivers, streams, ponds, and marshes, they are found in the estuaries as also in the coastal regions and open seas. The marine forms occasionally migrate upward into the estuarine waters and similarly certain fluviable forms pass down into the estuarine waters. Many fishes behave as larvaecidal agents. Use of such fishes against the growth of mosquito larvae plays an important role in the control of malaria—one of the prevalent diseases in India.

Amongst the cartilaginous fishes, which abound in Indian seas, some of the sharks and rays occasionally ascend large tidal rivers. The high nutritive value of the shark liver oil has opened up an exceedingly important trade in the fishing of sharks. The dried into of both sharks and rays are exported to China while the flesh of some forms is regarded as a delicacy by certain people, chiefly of the poorer classes:

Amongst the bony fishes the most important are the carp These are inhabitants of freshwater and many of them, particularly the major carp, bring high prices as edible fishes. Smaller carp are found in rivers and streams in large numbers. The scaleless cat fishes are well represented in India Amongst the Indian herrings which include several coastal and estuarine fishes, the most important fish is the hilsa, the flesh of which is highly flavoured. Amongst the perch which occur in India in fairly large numbers. the most valuable and largely used food fish is the bhekti of Bengal which grows to a weight of 200 pounds. Others, which are reputed as good edible fishes, include the freshwater forms such as nandus, the estuarine or coastal forms such as the mango-fish, the mackerels. pomfrets, tunny, and the mullets The notopterid chitals represent a well-known group of very compressed fishes. They are highly prized as good edible fishes due to the rich content of fat. Remarkable in India is the occurrence of the air-breathing fishes including the snake-headed fishes, the climbing perch, the scaleless fishes such as singhee and magur and the snake-like cunchia. These are found in every region where there is accumulation of water There are several forms of flat fish in India In the hill streams the sucker fishes occur The globe fishes, pipe fishes, and the sea horses are a few other interesting forms found in the estuarine and coastal regions Peculiar fishes of the estuaries and mud flats of the coastal

region are the mud skippers. The flying fish which inhabit the open seas are common about India.

Lower Chordates.—The lower chordates, including the balancglessus, the sea-squirt, and the amphioxus are not uncommon in the seas around the coast of India.

2. The Invertebrates

The inverteneate group comprising the less-known forms of animal life is in no way less important than the vertebrate one not less remarkable in variety and numbers. Many invertebrate animals are directly beneficial to man whereas many others are harming, injurious, and cause extensive damage to life and property. Many invertebrate animals provide articles used for commercial purposes and on these are based various industries of man. The invertebrates constitute an enormously large section of animais and only a few of the more important forms of the different groups are mentioned below in order to complete this sketch of the fauna of India.

The molluscs or shelled animals are well represented in India. They are found in estuaries, in fresh waters, in coastal waters as well as in the open seas around. The bivalved mussels as well as various forms of snails, including the apple snails, are found in ponds. Many gastropods of both shelled and naked varieties and the souids, cuttle fishes, octopus, and nautilus are inhabitants of the seas. The gastropod shells commonly known as cownes are reputed for their use in the past as exchange money. The blowing of chanks or conches is associated with sacred ceremonies and there has developed a good trade in the way of preparing bangles from chank for the women folk of India. The molluscan shells provide materials for road construction and are used in the preparation of lime. The oysters are used as articles of food and provide the source for the development of pearls. The pearl oysters are found in the coastal seas Pearl fishing was a highly developed industry in ancient India and there is a great possibility of this trade in future

The arthropods forming the largest group of animals are well represented Various forms of prawns, shrimps, lobsters, different types of crabs and the numerous small crustaceans occur in fresh waters, in estuaries, on sandy beaches, and in the seas. Amongst insects, in India are found the various forms of ants, wasps, hornets, honey bees, the cockroaches, white ants, numerous forms of butterflies and moths. the glow worms, mosquitoes of different types, locusts, grasshoppers, dragon flies, various forms of beetles, fleas, etc. Some predatory insects such as the praying mantis are beneficial by feeding upon injurious forms. The honey bee is of great benefit as producer of honey and wax. Some of the mosquitoes, certain flies

FLORA AND FAUNA

and the fleas, are definitely harmful and injurious and they act as transmitters of diseases and agents in spreading sources of infection. The locusts are the most well known among those which cause extensive damage to crops, whereas the silk moths and the lac insects are but two instances where these produce valuable industrial and commercial materials. In India, where there is an abundance of vegetation, the insects, particularly the butterflies, play an important role in bringing about pollination and the dispersal of seeds. Peripatus—a form intermediate between the segmented animals and the arthropoda—is found in the forests of the hilly tracts of Assam. The centipedes and millipedes are common throughout India. The scorpions and spiders are represented by various forms. In the coastal seas of India the king crab is found in fairly large numbers.

Echinoderms, or the groups of animals including the star fishes. the various urchins, etc. are all marine and found in the seas around the coasts. Of the segmented animals, the earthworms and the leeches of various types, including the large-sized cattle leech, are found all over India The burrowing segmented form known as the nereis is found in the shallow coastal seas. Sponges occur chiefly in the seas but freshwater sponges are not uncommon in inland waters such as ponds The coelenterates occur in abundance in the seas surrounding the Indian peninsula. These include the medusae, the jelly fishes, the sea anemones, etc The skeleton, which is present in many of these, especially of the sea anemones, forms the different types of beautiful coloured corals including the precious red corals The worms are represented by the round worms and by the flat worms, including the various tape worms. Most of these are parasitic on other animals especially the vertebrates. and pathogenic, causing diseases Various wheel animalculae occur in ponds and other freshwater regions. The protozoa or the unicellular animals include a large number of forms. Some of these such as the malarial parasite the leishmania, the entamoeba, cause serious diseases in human beings and often bring about the death of the victim. Others such as trypanosoma, babesia, coccidia, cause diseases of domesticated cattle and fowl and thus lead to huge losses of property. There are numerous free-living forms and also many parasitic forms which are however not pathogenic

¹ Introductory Essay to the Flora Indica, p 91

BOOK TWO THE PREHISTORIC AGE

CHAPTER VII

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

I. PALAEOLITHIC AGE

We have comparatively very scanty data on Early Man and his environment. Surface finds from the Punjab, Rājputāna, Gujarāt, Central India, Central Provinces, Karnātak, Mysore, South India. Bihār, Assam, and Bengal testify to the widespread existence of man who fashioned rough stone implements mainly of quartizit.

These were similar in shape and make to those known to be palaeolithic tools in Europe, but as in a majority of cases their stratigraphic relation was not known. they could not be assigned to a definite geological age. Recent researches have, however, contributed materially to our knowledge of Early Man in three or four provinces of India

We begin with the Punjab Except for the fact that it was one of the earliest homes of the Aryans, nothing definite was known about 11s first settlers, prior to the glacio-archaeologic work of the Yale-Cambridge expedition in 1935. It is now more or less established that Early Man first entered the foothills of the North-West Punjab, the area traversed by the Soan, Haro, and other rivers within the Indus-Jhelum Doäb, and comprised within the Rāwalpind and Attock districts of the Punjab and Jammu in Kāshmir State, at the end of the First Inter-Glacial Period and the beginning of the Second Ice Age in the south-west Himilayas. Human existence is testified to by the presence of large flakes which are found embedded in fan-shaped boulder gravels of this period (T₁) in the Siwalik foothills and plains in North-West Punjab Punch and Jammu

I First Inter-Glacial Age

Though the earliest implements of man have come from the immediately succeeding stratum, viz the Boulder Conglomerate zone of the second glacial epoch, it would seem that man had actually inhabited the area almost at the end of the First Inter-Glacial stage. The conditions for existence were not particularly favourable either for mammals or men in the Second Ice Age, to the first phase of which the Boulder Conglomerate stratum is assigned The climate was not only colder and stormier, but the rainfall was heavier than today, as the deeply stained gravels and implements show. In fact only a few rolled bones of bovoids and proboscideans are found in this deposit.

So far implements have been found in the Boulder Conglomerate at five sites Three of these—Kallar, Chaomukh, and Malak-

pur—are in the valley of the Jhelum and its tributaries, the fourth site is near Adial on the Sohan (Soan), and the fifth on the Tawi, a tributary of the Chenab near Jammu.

All the implements are made of quartzite and are in a worn condition. The upper surface is usually unflaked except for one or two small irregular scars. The under surface, having flat bulbs, but prominent cones, must be the primary flaked surface and has a large plain, unfaceted striking platform at angles varying from 100 degrees to 125 degrees. No retouch is visible except on one find from Kallar. The edges are broken, whether by use or naturally cannot be said.

Typologically as well as stratigraphically this earliest Punjab industry differs from the rest and hence it is called the Pre-Soan industry, to distinguish it from the later industry most of whose sites are on the Soan.

2 Second Inter-Glacial Age and Early Soan Industry

The Soan itself has two distinct groups. The early Soan and late Soan. Tools of the former group are found in Terraces T_0 and T_1 and later gravels mostly along the Indus. These have been observed at Khushalgarh, Makhad and Injra and at Gariala on the Haro river south-east of Attock.

Geologically these terraces are assignable to the Second Inter-Glacial Stage. This interval is believed to be very long, when the climate was drier, but owing to continued uplift of the Pir Panjel range, as evidenced by the tilted plans near Chaomukh and Jammu, there was great erosion. This may have destroyed the evidence of the rich contemporary fossil fauna without which man, whose existence is revealed by numerous sites, could not have lived in the area.

Unlike the Pre-Soan tools, the early Soan tools are made from varieties of fine-grained quartzite as well as fine smooth greenishgrey Panjal trap.

Patination and the state of wear divide these tools into three groups, which may be called A, B, C. Group A is the earliest and is heavily patinated, deep brown or purple and much rolled. Group B is deeply patinated like A but unworn, and Group C is less patinated and fairly fresh.

Among all these groups there are pebble tools, scrapers and flakes, the first-named predominating. There is evidence of typologic development towards smaller and neater forms, but it does not synchronize with the stratigraphic evidence

The pebble tools are all prepared from smooth, rounded rolled pebbles and small boulders. These, when further subdivided, give us (a) flat-based, and (b) rounded, pebble tools.

True discoidal cores often with a patch of cortex in the centre

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

of one or both surfaces are also found in this group. These cores are similar to the Clactonian and early Levalloisian forms

There are two kinds of flakes. The first has a high-angled plam platform and, though similar to the Early Soan B, is neater and better and more primarily flaked. In the second kind much smaller, the angle is low and the platform unfaceted While there is evidence of use, on these tools there is very little of secondary flaking

The Soan valley has also yielded other types of tools, probably of the Second Inter-Glacial Age, though they are rolled and occur in the gravels of the Third Glacial phase. These tools comprise hand-axes, cores and flakes, and a couple of crude cleavers. Typologically, very much rolled hand-axes are assigned to the Abbevillian or Lower Acheulian, and the less rolled, with more regular outline and neater step flaking, to the middle Acheulian

Mention must be made of the few flakes which show typical Acheulian technique with plain platforms and parallel primary flaking, and one or two showing signs of crude retouching

3 Third Ice Age and Late Soan Industry

Between the Early Soan and Late Soan industries intervened the Third Ice Age, and the latter are assigned to this period. During this glaciation which was comparatively less extensive, a vast amount of locssic (wind-borne) silt was deposited over the Potwar, a phenomenon which is attributed to the interaction of several factors accumulated silt owing to inundation, erosion, mountain glaciation, and violent dust storms

Since the Late Soan tools come from the basal Potwar gravel and loess which is attributed to the Third Ice Age, it is suggested that Early Man had witnessed the beginning of these dust-storms in the Punjab where they are an annual feature in the summer nowadws.

Few fossils have been found in these huge loessic deposits 4 But it is suggested that vegetation must have been more abundant in plains and the fauna may have been similar to that of the Narmadā valley, where remains of horse, buffalo, straight-tusked elephant, and hippopotamus were discovered in association with Early Palaeolithic tools However, the Potwar loess (perhaps its upper horizon) has yielded twelve types of fossil invertebrates, molluses (fresh water and land) and gastropods

The Late Soan industry is stratigraphically and typologically divisible into two groups. In Late Soan A some specimens are worn. Both pebble tools and flake and core tools occur, but the latter outnumber the former

Among pebble tools, a form which appears late in Early Soan viz a "side scraper". Hise implement, made on a roughly oval pebble, with cortexed butt on one side, and flaking along the opposite side, and a wavy straight or convex edge is common

Three other earlier forms are also found. But a new type is men a form where a small ovoid pebble is intentionally broken at an oblique angle to produce a flat base. Two or more flakes are struck upwards from the under-surface on the side that makes an acute angle with the bases. Some specimens exhibit retouch on the edge.

There are many forms of cores Flakes are of two types:
(1) simple, and (2) with retouched edges

Late Soan B tools are found in a deposit of wind-borne silt above the gravel of the Third Glacial Age They are fresh and unworn.

Mainly two types of cores occur, one of which was already noticed in Late Soan \boldsymbol{A}

Flakes again are generally of the Levalloisian type They are mostly blades or elongated flakes, and a few triangular or oval

4 Third Inter-Glacial Age. Chauntra Industry

So far the only tools met with were pebble tools and flakes But at a few sites, particularly at Chaintra on the Soan river, some totally different kinds of tools' were chiselled out from a gravel which may be of the Third Inter-Glacial Age. This was again a period of stream erosion, as a result of which the river beds were deepened, and lakes emptied. Mountain uplift also must have taken place However as in earlier stages, there are few evidences of locsic deposits

5. Fourth Ice Age Tools

Pebble tools and flakes found at Dhok Pathan near Pindi Gheb on the Sil river, a tributary of the Soan, are supposed to be later, possibly of the Fourth Glacial Age. The tools which include pebble tools, cores and unfaceted flakes are "regarded as representing a late, localized industry of peculiar facies, showing marked similarities, in a greatly developed form, to the Early Soan industries of the Indus region"

Early Man thus seems to have inhabited the Punjab from the end of the First Inter-Glacial period onwards right through the succeeding three glacial and two inter-glacial periods. As no human remains have been found along with the implements, it is impossible to say whether the same race witnessed such great climatical changes, and ultimately produced the fine hand-aixe and flake industry noticed at Chaultra, or other races came at different periods, or the old and new races lived together

The evidence detailed before indicates that pebble and flake industries developed together in the same area alongside the Abbevillian-Acheulian hand-axe industries In the former pebble tools become smaller and neater, and the flakes of Clactonian facies

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

—crude, unfaceted and devoid of intentional primary making—are later associated with neater forms such as Levalioisian type and have regular and convergent primary flaking, faceted platforms, and fine retouching. If any.

The hand-axe industry is for the first time associated with the Soan flake and pebble industry at Chauntra, and here alone it reaches its acme, flowering into a fine late Acheulian type.

On the basis of this contact, for which the evidence is so far slight, De Terra has said that Early Man entered the Punjab together with his hand-axe industry from the south.

After the Punjab comes Rājputāna where stray, mostly surface inds have been made. The few Rajputāna specimens come from Japur, Bundi, and Indargarh. These are generally of quartzite, but reddish-brown sandstone accounts for one specimen Among the tools two types of hand-axes are visible. One is pointed ovate and the other is ovoid. It is roughly chipped and called "Boucher" by Coggin Brown.

Rājputāna leads us to Gujarāt. Here, as elsewhere, only surface finds were made in the last century. But since the discoverer—Bruce Foote—had given good clues together with an excellent study of the stratigraphy of the Sābarmatı valley, the task of obtaining stratigraphical evidence was comparatively easy. And it was obtained by the First Gujarāt Pre-historic Expedition. During its survey of the middle reaches of the Sābarmatı, a distance of over 100 miles from Hadol in the north to Delwad in the south, five more palaeolithic sites were discovered. Of these the most important were Hadol, Pedhamli, and Ghadhara, of lesser importance Phudera. Allod Hirtoura, Kot. and Warsora

The implements are mostly fresh and a few only rolled or semirolled, with worn-out edges and flake scars. Typologically they comprise: (1) hand-axes (including sub-types), (2) cleavers, (3) scrapers, (4) flakes, and (5) pebble tools

No clear evidence of sequence corresponding to the succession of the three or two main phases of the old alluvium, viz. the gravel conglomerate and the reddish silt, is visible in the industry. For the two main typologic features of the industry, which from the predominant tool type has to be called hand-axe industry, are evident in practically all types of tools from the lower stratum. Thus there are:

- (a) Tools with irregular line, rough 'step' flaking, and pebble cortex at the butt-end or over part of both the surfaces
- (b) Tools with regular outline, wavy edges, comparatively smooth "step" flaking and no pebble cortex or the cortex patch at a definite place

While this is generally true, there are three specimens-two hand-

axes, one pear-shaped, and the other very thin, perfectly symmetrical ovate, and an U-shaped cleaver—from the upper part of the reddish silt which are so fine as to suggest a late typologic evolution corresponding to the uppermost phase of the alluvium.

Typologically these three varieties of hand-axes bear close resemblance to (i) the Abbevillian-Early Acheulian, (ii) the Middle Acheulian, and (iii) the Late Acheulian industries of Madras and the Punjab as well as those of Europe, and similar sequences observed in the Nile Valley and the rest of Africa.

A site bearing similar cultural products was discovered by the expedition in the Orsang valley at Bahadarpur Here the gravel is loose and uncemented and is approximately at a height of twenty-five feet from the present river bed, and underlies deposits of black cotton soil and brownish silt. The top of the gravel yielded a few finds of quartz and quartzite. Unlike the Sābarmati specimens, the majority of the Orsang tools are rolled or semi-rolled and a few only fresh. Typologically these comprise (a) hand-axes, ovate, and pear-shaped, (b) flakes, one of which is a definite blade, and (c) nebble tools

The Karjan, a tributary of the Orsang and Narmadā, has also given a similar promise of the Old Stone Age culture Here tools, hand-axes, U-shaped cleavers, of Vaal technique, beautiful discoids and pebble tools of trap have been found. 10

We next proceed to the Upper Narmadā Valley, where stratigraphical data for the existence of Early Man are available Unfortunately even now a complete idea of this stone industry cannot be formed, as the specimens found by the Yale-Cambridge Expedition are not fully described However, the expedition succeeded in establishing the relationship of a middle Pleistocene fauna with an early Palaeolithic industry, a relationship which was so far presumed on the strength of a solitary tool—an over hand-axe from a site at Bhutara and fossil mammalian remains Stratigraphic correlation is also attempted between the Punjab and the Central Indian Pleistocene on geologic and archaeological evidence ¹¹

Narmadă Valley has given a glimpse of the various types of industries—Early and Late Soan and the Abbevillian and the Acheulian hand-axe-cleaver At some localities there is a mixture of the different types, whereas at one locality near Narsinghpur the Late Soan seems to replace the Acheulian culture. De Terra, however, would tentatively suggest that the Narmadā "lower group represents the true Acheulian and early Soan, and the upper group the Late Soan Industry." If this were really so, the two Narmadā gravel groups could be correlated with the Terrace, Terrace, Terraces, -4 of the Punjab. Whether it was actually so or whether the various industries flourished simultaneously, the gravels belong-

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

ing to one geologic age, can be determined only by further research and collection of fuller data.

The rest of the evidence in Central India and the Central Provinces consists of surface finds collected in the last century from Saugor, Damoh, Rewsh, and Bundelkhand. In this region, which is the meeting-place of the three great geological formations, viz. the quartzite (which has principally developed on the west, in North Gujarāt, and Rājputāna), the sandstone (in Central India), and the trap (which extends from the Mālwa plateau towards the south), tools of all these materials are found. Typologically the tools are similar to those of Rājputāna and North Gujarāt.

Further east a few finds have been reported from Bengal, Bihār, and Orissa, from Paloncha, on the eastern outskirts of the Hyderābād State, and from Hyderābād tistel, "S of ar Bengal had give few palaeoliths but recently a large number has been discovered at Kuliana, in Mayurbhanj State (Orissa). 4 The tools are quartizte and include:

(a) Pebble tools, some of which resemble crude hand-axes, and others cleavers. There are also choppers, ovate forms and awl-like pointed tools

(b) Core tools, both faces worked.

South of the Vindhyas, after the Narmadā Valley, the next important region is the Konkan coastal strip and the Decean plateau Little work was done in the latter, because of its peculiar geological formation. However, fossil fauna of the middle Pleistocene period was found at Mungi and Nandur Madhmeshwar in the Godāvari valley. At the former site an agate flake was noticed in the same stratum. Following up these clues the present writer and his associates have been carrying out a systematic survey of the valley It has yielded small flakes, blades, and cores of agate, jasper, chalcedony, bloodstone, and trap, 15 but no heavy tools like hand-axes or choppers.

Rade stone implements have been reported from the vicinity of Bombay since 1880. Much of this early work is, however, mere surface collection and not well illustrated. Slight but important is the notice by Toddi 6 of Palaeolithic industries in the Salsette Island north of Bombay. Here at Borivil, Kandivli, and other suburbs he discovered tools comprising hand-axes, cleavers, flakes, blades, and microliths. It appears that hand-axes and cleavers were found only at Kandivli. Here no less than six strata were observed. Scrapers, cores, and choppers were found in "Lower Clay" and over its "top," forming the lowest stratum over the rock Overlying this clay there is a deposit of reddish-brown gravel In it were found many implements of Chellean and Clactonian type, and on its top, implements of Clactonian type in mint condition, as

well as late Acheulian types. The Konkan, with its sequence of industries, thus promises to be one of the key areas for understanding the evolution of Stone Age cultures in Western India.

It is likely that similar early paleeolithic culture flourished in the region lower down, in Southern Konkan and eastwards above the Giusts in the Karnātak area. Foote found an extinct type of rhinoceros and hand-axes in the hard kankar cemented shingle bed of the Bennihalla, a tributary of the Malaprabhā in the Unārwar district, and also in the shingle bed of the Malaprabhā itself in the Bijāpur district. These tools are large ovate hand-axes and cleavers of qualtatte, very much resembling similar tools from the Konkan and the Sābarmatī.

Foote also found a few palaeoliths in the Mysore Karnātak."
Some he found "scattered on the pale quartzite shingle bed capping
the high ground south-eastward of the town of Kadur" and also
at Nyamti, sixteen miles south of Shimoga; others from the laterite
debris near the villages of Nidaghatta and Lingadahalli south of
Sakrapatna Two of the latter are of white quartz, all the rest of
quartzite The quartzite specimens are mostly patinated There
are no cleavers, the hand-axes are of oval, ovoid and triangular types
Discs and discoids are also found. No palaeoliths have been reported further south on the Malabar coast

In contrast to these scanty notices of palaeolithic finds on the west coast of India, the east coast area with the suitable material from the Eastern Ghâts has proved very rich in these finds Barring the southern extremity, viz the Tinnevelly district and some gaps from West Godávari district to Ganjam in the north, palaeoliths have been found from most other districts, viz. Madura, Trichinopoly, North and South Arcot, Chingleput, Chitoor, Cuddapah, Anantpur, Bellary, Nellore, Kurnool, Guntur, and Krishnā, of the Madras Presidency. Of these North Arcot, Chingleput, Cuddapah, Bellary, and Kurnool districts yielded the largest number

In the Madura district the finds were collected "from a shingle bed in the alluvium of the Vaigai, on the left bank of the river immediately north of Madura town", in the Tanjore district from the "faterite deposit lying to the south-east of Vallam and south-west of Tanjore city", in the Trichinopoly district "from the laterite forming the plateau east of Ninniyur, forty-five miles north-east of Trichinopoly town" in the Bellary district "on the surface of the shingle fans lying along the foot of the copper mountain south of Bellary town." also from the Halakundi shingle fans and other sites, in the Cuddanah district from "thin spreads of laterite gravel." in Rayachoti Tāluk: in the North Arcot district "in connection with laterite capacity at values and the strict of the strict spray of the str

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

ly washed out of the laterite gravels resting on the gneissic rocks"; in the Maneru valley; in the Kurnool district "in the valley of the Khunder near Roodrar in lateritic gravels"; in the Guntur and Krishnā districts 'from the highlevel gravels" at Ippatam and Oostapalli on the Krishnā.

The above review shows that the laterate beds in south-east India are implementations. But since Foote had not worked out the stratigraphy completely, nor indicated the typological relation between the finds from the laterate gravel and other gravels and the surface, the value of his large number of finds is mainly typological and not so much cultural.

This want has been to some extent supplied by Cammiade's work in the Kurnool and Krishnaswami's and Paterson's work in the Chingleput district. Cammiade in collaboration with Burkitt has given a correlation of the sequence of industries and stratigraphy with that of climatic changes in south-east India. ¹⁹

According to these authors the tools can be stratigraphically and typologically divided into four main groups which synchronize with two dry and two semi-humid periods, the first two alternating with two pluvial periods. Tools found in the laterite pebble bed in the Bhavnasi gravels at Krishnapuram (78° 73' and 15° 40'), on the western entrance of the Atmakur-Dornala Pass, "in the derived quartzite pebble bed" on the Ralluvagu and Yerra-konda-Palem (79° 10-15' and 15° 40-45') on the eastern entrance of the same pass, in "the derived laterite" bed on the bank of the Sagileru, at Giddaiur (78° 55' and 15° 22-23') near the Nandikanama Pass, and from the upper part of the laterite overlying the gness basal bed at Gundla Bhrameshvaram, a little to the south of the Krishna, constitute the earliest series comprising hand-axes (of quartzite) rather roughly flaked, slightly rolled, and stained with laterite, whereas tools from the superimposed layer of red alluvial clay at Krishnapuram constitute the second series comprising mostly flakes, and a few neatly made hand-axes (of quartzite, sandstone, and chalcedony). Tools of series three and four comprise microlith-like and microliths respectively

The work of Krishnaswami o and Paterson has still further advanced our knowledge of the palaeolithic industries in the Chingleput district The former discovered tools in the pre-laterite Boulder Conglomerate at Vadamadurai, whereas the two together observed a system of four terraces in the Korttalaiyar Valley, the laterite conglomerate of the Terrace T, at Attirampakkam yielding, as it did to Foote, numerous palaeoliths, typologically similar to those from the main detrital laterite overlying the Boulder Conglomerate at Vadamadurai

The technical stages of two series of tools from the Boulder Conglomerate have been described in European terminology as re-

presenting the Abbevillian and the earliest Acheulian, that of the tools from the laterite gravel as resembling the middle Acheulian; and that from the layer above laterite as "probably upper Acheulian."

The hand-axes and cleavers from the Attirampakkam laterite are considered to be Late Acheulian or, according to Krishnaswami, Late Acheulian, Micoquian, and Levallosian. The Madras Museum abounds in collections from other districts: Cuddapah, Nellore, Anantpur, and Kurnool. Of these the collections made by Manley²¹ from Nellore and Drummond from Kurnool deservemention.

From the above review it would appear that practically every part of India except the great Indo-Gangetic plain has given traces of its hoary antiquity. But excepting a few areas, nowhere is the stratigraphical sequence of the Stone Age cultures worked out. Until this is made available, it would be hazardous to opine in what part of India Early Man originated, and what the exact relation. It is either in time or between the Stone Age cultures above reviewed. The accepted geological antiquity of and the favourable climatic conditions on the eastern coast of South India, and the reported finds from the pre-laterite Boulder Conglomerate at Vadamadurai would, however, give ground for a view that Early Man in India originated in South India, and migrated towards the Punaba et the close of the First Ice Age.

2. THE MESOLITHIC AGE

The cultures which succeeded the Palaeolithic in Europe and certain parts of Africa exhibit certain definite features. On the correlation of these with stratigraphic sequence obtainable at a few sites, two main cultural stages have been recognized. (1) the Transitional or the Mesolithic; (2) the Neolithic. The old glacial conditions had more or less gone and Europe experienced a long dry spell. With the climatic changes the flora and fauna also changed, and most probably a new race of people entered Europe Culturally, however, this new race was still in the hunting stage It did not produce food. And above all the implements used were primarily of stone, though bone was also used.

But the nature of these tools is absolutely different. These are extremely small, about an inch or so in length. The technique of making them is also different. Hence they are called microliths or pygmy tools. Except a few Tardenoisian sites in France, and a few in England, most of these implements have been found from the surface, on loessic mounds, or in sandy areas.

Such microliths have been found in practically the whole of India Footc⁵³ noticed them from almost all the districts of South India, including Tinnevelly. Hydcrābād State Gujarāt, Kāthiāwār Central India, Central Provinces, and Chotā Nāgņur, whereas subsequent workers have discovered them in Cutch²⁺ and the Punjab²⁺. But unlike Europe, these were all surface collections. In the absence of startigraphical evidence or other cultural objects from well-conducted excavations it is not possible to assign the microliths in all these areas to a mesolithic period. In some instances microliths appear in dolmens with from implements, in others with pottery which can be dated to the fourth century B. C. Thus in uniferent regions, according to their geographical situation and cultural development, microliths have been in use as forming composite tools and weapons at widely different periods. These might extend from the mesolithic to historic times.

Small but systematic excavations at the site of Brahmagiri (Chitaldurg district, Mysore) and at Langhnaj (Mensana Tāluk in Gujarāt) have produced evidence to show that at least at these two sites the microliths might belong to the mesolithic cultural phase.

At Brahmagin both neoliths and microliths appeared at the five-foot level, but later at eight feet only, microliths were found. So it is suggested that at this site, called Roppa after the nearest village, micro-neolithic culture, comparable to the Compginan of France, flourished. Whether it is so old in point of time cannot be determined, for it yet remains to be proved stratigraphically, as has been shown in Europe, that such cultures are post-Quaternary, and earlier than true Neolithic.

Almost similar is the case with notices of microlithic cultures in the rock-shelters in the Mahadeo Hills at Panchmarhi? and at Uchali28 near Naushahra in the Punjab. At the latter site microliths were found in association with neolithic-like pottery and skeletal remains of Homo sapiens, which were in very friable condition. At the former site pottery was found in the first few inches, but below it, a foot deeper, there was no pottery at all. Dr. Hunter who conducted the excavation thought the culture to be pre-Neolithic. whereas on the evidence of paintings on the rock, it is surmised that the culture cannot be older than the second century B C. It must be said that Major Gordon,20 whose study of the paintings is indeed scholarly, has not pointed out any stratigraphical or cultural relationship between the paintings and the microliths. It is quite possible that potsherds, which Dr. Hunter found on the surface, belong to the earliest or some phase of the paintings, but that there is no connection between the paintings and microliths.

Excavations in the loessic mounds at Langhnaj. as well as at Hirpura in Northern Gujarāt, have recently brought to light a rich microlithic culture Potsherds usually occur up to the first three feet from the surface, along with microliths and a few fossilized (calcified) remains of animals Deeper, up to six to seven feet, only microliths, in association with numerous bone splinter; including a number of large bones of animals (such as ribs, shoulder blades.

astragalli, humerus, tibia, teeth, and parts of jaw, fish vertebrae, skeletons of lizards, and other many hitherto unidentified remains) together with seven human skeletons (one intact, and the rest more or less incomplete) have been found.

From the total absence of metals, relative rarity of pottery, and the almost complete calcification of human and animal remains (which is by the way remarkable when compared with similar finds so far made in India from historic and proto-historic sites, and Sub-Recent deposits in the Potwar loses) it is probable that the Guiarát microlithic culture is of considerable antiquity.

Racially these human skeletons show Hamite Negroid characteristics, and hence might have been of people akin to those in North-East Africa and also prote-Egyptians. These folk lived on small hillocks and drew their water supply from the hillock-girt in-undation lakes. They were primarily hunters and subsisted on such game as the cow, buffalo, wild horse, ox, sheep, goat, rats, fish, and crocodile. They must have used jungle fruits and other forest products, but so far we have not found any remains of these in the shape of stones, etc.

The crouching posture in which the skeletons have been found leaves no doubt that they were deliberately buried, with a definite idea of orientation. Out of seven skeletons four have their head facing the west, and the remaining three, one of which is that of a young woman, have their head facing the east Large stones—pebbles of quartizite and portions of querns of sandstones—had something to do with the burial ceremony. For these are usually found near the head of the skeletons. The dog also must have played an important part in the life of these people, as so far two almost complete skeletons have been found near the human remains, whereas the rest of the animal remains consist of isolated fragments only.

Whatever the age or ages to which the microliths in India be ultimately assigned as a result of further research, the present collections, particularly those made in Gujarāt, can be typologically classified in the following groups, each having several varieties or sub-divisions:

- (1) Rectangular blades.
- Crescent blades These are primarily one-edged, the back side being made purposely blunt.
- (iii) Scrapers These are mostly thin, flat pieces with one side more sloping than the rest and edged.
- (v1) Points
- (v) Cores.

THE NEOLITHIC AGE

The neolithic cultural phase in India is so far indicated by one of its main constituents, namely, stone tools. These, unlike

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

those of the earlier cultures, bear unmistakable signs of polish, either all over the tools, or at the butt-end and the working end, or only at the working end. The material is also different. While the palaeolithic man seems to have preferred fine-grained quartzite, the mesolithic chalcedony, and other silicate varieties such as jasper, chert, and bloodstone, the man of this age liked to fashion his tools out of fine-grained dark-green trap, though there are examples of diorite, basalt, slate, chlorite schist, indurated shale, gneiss, sand-stone, and quartzite.

How, when and by whom was this culture introduced, and the earlier replaced, cannot be said for want of suitable data. Polished stone implements have a very wide distribution They have been found in several districts of South India, but particularly Bellary, Mysore and Hyderābād State, Central India, Central Provinces, Bundelkhand, Guparāt, Kāshmir, West Bengal, Chotā Nāgpur and Orissa. Lake the microliths, these tools have also been found in funerary monuments along with iron objects. So they seem to have gone over well into Iron Age and early historic periods.

However, as in the case of microliths, excavations at two or three sites in India have shown that these polished stone implements or drilled hammer stones antedate the Iron Age. The first site is Brahmagiri, mentioned above Here the neoliths stratigraphically lie below the early Iron Age and historical cultures, and above the microliths.

At Langhna), again, a large pierced hammer stone of quartzite with splayed hole from either side, and the front part of a polished celt have been found.31 The celt has a broad rounded point and smooth, polished, biconvox surfaces; the other end is broken. The splayed holes and the absence of vertical druling in stone tools, particularly hammer stones, are regarded a characteristic of the Neolithic Age in Europe, while the second implement recalls similar implements of neolithic type from South India and Bengal Typologically these would be the only neolithic tools from Gujarit For the large majority, classified by Foote as neoliths, are really microliths. And if other sites yield results similar to those obtained so far from Langhnaj, then the Gujarāt microlithic culture will have to be assigned to a mesolithic period

Excavating a megalithic monument at Burzahom in Käshmir De Terra found neolithic celts below a chalcolithic (*) layer in post-glacial loess associated with hard grey hand-made pottery decorated with incised designs. *22*

The neolithic celts in India which have been so far illustrated³³ may be classified into the following types:

 Triangular outline with rounded corners, slightly convex working edge, the sides converging into a pointed but

- round butt end (Coggin Brown, Pl. V. 1, 9, 13, 15, 19) polished all over on both sides (Pl. VI. 1, 4, 8, 11, 14; VII. 2, 3, 4).
- (2) Cylindrical or elongated oval, convex edge, sides converging into a pointed butt end, biconvex sides, polished all over on both sides (Pl. V. 5, 8, 10; VI. 10, 3).
- (3) Broad edge, with rounded corners, sides slightly tapering but ending in a broad convex butt end, surfaces unpolished (Pl. V. 20).
- (4) Oval and ovate, one end convex, the other pointed, polished all over (Pl. VII. 5).
- (5) Chisel-like triangular, almost straight edged sides converging into a rounded point (Pl VII. 1; IX. 6).
- (6) Long, thin, slight convex edge, tapering sides, but broad straight butt.
- (7) Convex edge, slightly tapering sides.
- (8) Thin and pointed rounded sides broad butt polished all over (Pl IX. 12).

Hammer stones:

- I Round without any hole.
- II Round or oval (PI VI 7) with a hole in the middle splayed from both sides (PI VI 9: VII 6)

The above gives a very rough and tentative idea of neolithic tools in India It needs to be improved by a scientific classification of the collections in the Indian Museum, Calcutta, and Government Museum. Madras, and in the museums at Mysore and Hyderäbäd.

Much has been said about neolithic culture. According to some scholars the people of this age understood the use of fire, made pot tery, cultivated grain and domesticated animals. But as these theories are based on surface finds alone, no definite conclusions are possible until positive evidence is furnished by further excavations. The same remark applies to the views of those who would refer to this age the ender-mounds, rude drawings in caves, as well as the so-called cup-marks or "small hollowed depressions in the rocks," sometimes regarded as a system of writing. It is highly questionable whether all these really belonged to the Neolithic Age and hence no detailed account has been given of them

THE COPPER AND BRONZE AGE

When metals began to be used is very difficult to say in the absence of stratigraphic sequence of cultures, and for want of unanimity of opinion on the age of the Rigueda and later texts which refer to a metal—nuas—interpreted either as copper or iron Until the discovery of the Indus culture (which is treated in detail in Chapter IX) the only evidence for the presumption of a Copper Age in India

PALAEOLITHIC. NEOLITHIC AND COPPER AGES

consisted of surface finds, mostly from the Ganges-Jumnā Doāb. Recently some finds have been made at Kallur in the Hyderābād State and a few copper and bronze weapons, tools, and vessels have been found in dolmens and other sepulchral monuments from Nāg-pur, Hyderābād, Madura and Mysore.

In spite of a few stray finds of copper or bronze weapons, tools, and vessels from South India, it would appear that Copper or Bronze Age cultures principally flourished in North India, in the great alluvial plains, stretching from the Arabian Sea to the Bay of Bengal. And it is traces of these that off and on turn up in the Ganges-Jumna Doäb the Punish and Sind 3.

The raw materials—copper—for the tools could be had, as has been shown recently by Piggott, from the copper ore deposits in Rajputāna and Chota Nāgpur, and Singhbhum in Bhār, and Orissa. The finds from several hoards, the largest of which was from Gungeria, consist of tools, weapons and ornaments, such as axes, swords, dagers, harpoons and rings.

Excluding the solitary socketed axe-edge from the upper levels of Mohenjo-daro, all the axes so far found are "variations of the most primitive form of metal axe, called usually 'the flat axe' or 'blade axe'.' These have been grouped into five classes by Piggott's according as they have parallel or tapering sides, straight or rounded butt, straight or convex cutting edge and are shouldered, elongated, etc.

All the swords found in the hoards from the Ganges valley, notably from Fatehgarh, near Farrukhābād, as well as at Kallur in the Hyderābād State, are practically of one type. The hilt and blade are cast in one mould. The blade is leaf-shaped, having a slight but distinct mid-rib. The hilt has antennae.

So far there is a single example of a dagger from an unknown locality. It is of the same type as the sword. The hilt and blade are of one cast; the blade leaf-shaped and ribbed, the hilt has a common butt, with forth-jutting angle.

The harpoons provide a most interesting evolutionary series

- (a) The most primitive form has a rough blade with bilateral barbs, slight mid rib, a simple tang with one or more holes below the lowest pair of barbs.
- (b) More advanced form in which the blade becomes a separate element, the barbs are placed below it, but still resemble in shape those of type α .
- (c) The blade is now leaf-shaped, and the barbs curved, and twice the size of the other examples.

Besides these there are a few copper "riugs," a couple of bent tools, with a "celt-like" flat and "human-figure-like" objects, and stylized lunte age or lance-heads ⁶⁷

Whence and how did these copper or bronze weapons come to the Ganges valley? A definite answer cannot be given but it is suggested by Heine-Geldern38 that the prototypes of the simple celtlike axes, as well as the various types of swords, daggers, and harpoons can be traced back, through Iran, to the Caucasus and Danube valley, where these tool types existed at least before 1200 B.C. Hence he is of the opinion that in these stray copper or bronze objects, we have traces of the migration route of the Vedic Aryans Piggott is also inclined to the same opinion, though he would ascribe the harpoons, a product of riverine culture, to a group of foodgathering tribes who, living primarily on fishing, acquired a knowledge of metal working from some centre of higher culture and transformed their characteristic hunting weapons accordingly. How this culture-contact could have taken place has been shown by Heine-Geldern, who thinks that the forepart of the most advanced harpoons of the Ganges valley may have been influenced by the javelin heads from Transcaucasia

This culture is supposed to be posterior to that of the Indus Valley because in the latter, besides the continuance of the use of stone tools—the blades, etc, resembling larger microliths—the copper tools and weapons are of the simplest type The harpoons and the sword are so for absent and the flat, broad-edged as-head is obviously a copy of the Palaeolithic U-shaped cleaver and the Neolithic celt, a fact which can be demonstrated by typological studies, but not yet by stratigraphic sequence of cultures

5. THE IRON AGE

The only evidence so far for assuming the transition from Copper and Bronze or Stone Age culture to the Iron Age has come from megalithic monuments such as dolmens, cromlechs, cairns, and menhirs. These have a very wide distribution in India They have been found almost all over South India, Karnātak, the Deccan, Central India, Central Provinces, Orissa, Bihār, Assam, Rājputāna, Gujarāt (very few), and Kāshmir. Only a few have been systematically excavated This is enough to show that these monuments belong to different periods—from the late pre-historic to historic periods.

The Käshmır (Burzahom) megalith is assigned to a neolithic period. 40

The Ranchi monuments, 41 some of which are credited to the Asuras by the present-day Mundas, yielded such a mixed assortment of finds as polished stone tools, carnelian beads, wheel-made pottery, copper and bronze objects, copper and gold ornaments, and even iron slags, that it is impossible to date the monuments to any one age.

The Rajputana monuments also yielded earthen vessels with

PALAEOLITHIC, NEOLITHIC AND COPPER AGES

lids, containing partially burnt human bones, skeletons in flexed position, microlith-like flakes, etc.

Monuments south of the Vindhyas, those in the Hyderabad 12 and Mysore States,43 and in the rest of South India,44 particularly the monuments examined by Rea at Adittanallur, in the Tamraparni valley (Tinnevelly district), at Perumbair (Chingleput district), at Kaniyampundi (Coimbatore district) and Perungulam (Malabar), have also produced evidence of a varied stage of cultural development, which must not have been uniform even in peninsular India. Along with beautiful thin-walled red and black pottery of different types, and huge thick-walled ones, are often found microlithic flakes of agate, or crystal, carnelian beads, neolithic celts, and tools and weapons of iron and, at times, of copper or bronze.

If it is difficult in our present limited knowledge, to trace the transition from the Stone or Copper Age to the Iron Age through these megalithic monuments, it is no less difficult to understand the purpose and types of these monuments themselves Most of these are funerary, connected with the disposal of the dead. But it has also been shown that megalithic monuments in Assam were connected with fertility rites and ancestor worship " Different motives have thus contributed to the raising of these megalithic monuments. To unravel these and weave a cultural pattern out of the separate threads is the great task of Indian archaeology. But unless the monuments are studied scientifically no conclusions as to their true nature, age, and origin4° can be formulated 47

sımha Mahārāja Rāyvābhisheka Granthamālā, Memon No IV. Baroda, 1946. Ibid. Pl. XII

11 De Terra, op cit., p 314 Full details of every layer are not given

12 Brown, op cit
13. Ibid, and Foote, Notes on Ages and Distribution, 1916

we, and Foote, notes on Ages and Distribution, 1910

According to the brief summary given by Chattopadhysy, K P, in JRASB(L), X, pp 97-8.

BDCR1 1V, 1-16

BJCR1 1XIX, pp 257-72, Pl. XIV

11. For this and the succeeding paragraphs see Foote, Notes on Ages and Distribution.

bution, 1916

18 Cammiade and Burkitt, Antiquity, 1930, pp 327-39

¹ Das Gupta, H C, Bibliography of Prelistoric Indian Antiquities, 1931 2 See De Terra, H and Paterson T T Studies on the Ice Age in India and the

See De Terra, H. and Paterson T.T. Studies on the Ice Age in India and the Associated Human Cultures 1939, pp. 301-10.
 Ibid, Pl. XXXII. A and Pl. XXXIII.
 But the reason De Terra and Paterson assign (op cit, p. 275) viz. "The wind-borne nature of the silt, and its high percentage of lime," which is supposed to be unfavourable to the preservation of bones, does not seem to be correct to be unfavourable to the preservation of bones, does not seem to be correct animal remains have been recently found in Guparia Cf. NIA, April 1944 and Preliminary Report of the Third Guyard Expedition, Poona 1945
 De Terra and Paterson, op cit. Pl. XXXIX-XLII.
 Ibid, Pl. XLII.
 Ibid, Pl. XLII.
 Ibid, Pl. XLII.
 Sankalia, H.D., Investigations into Prehastoric Archaeology at Gujserit, firl Pratiques such as a supplied to the control of the property of the present and the

19 Krishnaswami V D. Prehistoric Man Around Madras (Indian Academy of Sciences, Madras, 1938)

De Terra and Paterson, op cit, pp 327-33

- 21 See Aryappan Manley Collection of Stone Age Tools, MASI, No. 68 (1942). 22 For a provisional correlation of the Lower Palaeolithic Cultures all over the world see Paterson "Geology and Early Man," Nature 1940, pp 12, 48, 51.

23 Foote, op cit Gordon, JRASBL, VII, p 129 24

- 25
- Do Terns, op cit, p 277

 Krishna M H. Mysore Archaeological Survey Reports, 1942, pp. 100-9

 Hunter Nagpur University Journal No 1, p 31 and No 2 p 127 36 27

De Tena op cit, pp 277-8

Gordon, Art and Letters 1936, pp 35-41

Sankaha, op crt. pp 64-100 and Sunkaha and Karve, NIA. VII, 1-6, and prelamatary Report of the Third Guyardt Prehistoric Expedition, Poona, 1945
 Sankaha and Karve, Report of the Third Guyardt Prehistoric Expedition, Poona,

1945

- De Terra and Paterson op cit, pp 233-4 and Pl XXIV
 The two main works are Brown's Catalogue, and Foote's Notes on Ages, etc., and Catalogue Russonne, and Catalogue Madras Museum, see also Das Gupta, Ethiography which deals with indis made up to 1930-31. For later notices see cunual Reports of the Mysore and Hyderabad Archaeological Departments
- 34 Cf CHI I 613-4 Lett J 103-90. Free collected and commented by Smith in 1A XXXIV 222 and XXXVI St B. Brown used these in his Catalogue (1917), brought up to date by Dax Gupta, Bibhorynphy (1931), reclassified by G N Mulcherjee in 11BQ, VO IX, p. 522, and some items commented by Helme-Geldern (JISOA, IV, 87-115) and Paggott ('Prehystoric Copper Hoards in the Ganges Bosin'' Astinguity, 72, December, 1944)

26 Piggott, op eit

17 Smith, op cit , POC IV. 1928, pp 729-34

38 Heine-Geldern op cit

- Das Gupta, op cit, for notices up to 1930-31 Later notices are mostly in the Reports of the Mysore (1932 and 1940, 1941, 1942, 1943) and Hyderabad Archaeo-
- loyed Departments (1887-40), ASI and BDCRI 1983) and rivertand recommendation of the property of the Comments of Knahm, p. 11, P. XLIII, et also The Progress of Science in India diarms the Prost Twenty-Five Years 1938, pp. 309-13

 1. Roy. S. C. 1806S. 1, 228-33, 16-17

- 1? Hunt, IRAI LIV, p 140 ff

- Hout, RAI LIV, p. 140 ff
 Where Arch Rrp. op cit (See note 38 above)
 Rea, ASI 1902.61, 394-05
 Hander ASI 1902.61
 Rea, ASI 1902.61
 Rea, ASI 1902.61
 Read to the Company of t
- 15 useful 47 The writer is indebted to Rao Bahadur K N Dikshit, the Director General of Archaeology in India for having gone through the chapter and making a number of surre-tions

CHAPTER VID

RACE MOVEMENTS AND PREHISTORIC CULTURE

It is strange (and somewhat difficult of explanation) that skeletal remains of Early Man in India, particularly in the prehistoric and early historical times, should be so scanty. This lack of material has not allowed us to postulate with certainty about racial movements in ancient times, and any appraisement or reconstruction of movements of peoples in India, some four or three or even two thousand years ago, is bound to remain largely hypothetical, and based on or inferred from the present-day situation only Race is not, of course, synonymous with language; but when a language was becoming characterized as a distinct type in a particular area and among a particular people in prehistoric times, it formed an important cultural expression of that people, and as such a connexion between the two is justified, always bearing in mind the great fact that language is after all but a secondary expression of culture and that it is largely transmissible from people copole.

Racial anthropology, dealing with the physical features of a people, has sought to analyse the various elements which have contributed to build up the population of India, irrespective of what cultural ethnology has to say about languages and cultures. Various views were advanced by diverse anthropologists about the reaction elements in the population of India. Until recently, the view that occupied a position of prestige as a sort of official pronouncement on behalf of the Government of India was that put forward by the late Sir Herbert Risley. 1

This view, adopted in official publications and accepted very largely both in India and outside India without any questioning, divided the people of India, quite arbitrarily, with both insufficient data and immature science (not wholly free, it might also be suspected, from political bias), into seven broad groups, labelled as Mongoloid, Indo-Arvan Dravidian, Mongolo-Dravidian, Aryo-Dravidian, Scytho-Dravidian, and Turko-Iranian An Indian anthropologist like the late Rama Prasad Chanda made a more systematized essay based on both anthropometric data and early tradition as preserved in ancient Indian literature towards a determination of the various racial elements in India?

The next advance in this direction was made in 1933 by Dr J H Huttons when a statement as to the race-cum-language-and-culture secuence in India was proposed which took note of the advance made in anthropology and ethnology since 1900 According to this

view, we have the advent of the following peoples in India from the outside (no kind of man originated on the soil of India, all her human inhabitants having arrived originally from other lands, but developing within India some of their salient characteristics and then passing on outside India), their names being given in an approximate order of their arrival:

- (1) Negritos, brachycephalic Negroids from Africa, the oldest people to have come to India, now surviving in the Andaman Islands (where they have retained their language) and in Malaya; and traces of them seem to occur among the Nāgās in Assam and among certain tribes in South India.
- (2) "Proto-Australoids," black, dolichocephalic, platyrrhine, apparently an early offshoot of the Mediterranean race, who came from the east Mediterranean area (Palestine) The Melanesians appear to be in their racial basis of this early Mediterranean Proto-Australoid origin, with modifications from other races both inside and outside India.
- (3) Early Mediterraneans, leptorrhine dolichocephals, who brought earlier forms of the Austric speech.
- (4) Civilized or Advanced Mediterranean, leptorrhine dolichocephals, who became the "Dravidians" in India.
- (5) Armenoids—'a specialized off-shoot from the standard Alpine stock"—brachycephalic—probably came with the Civilized Mediterraneans ("Dravidians") and spoke their language
- (6) Alpines—brachycephalic, leptorrhine. found in Gujarāt and Bengal, earlier than Vedic Aryans, but probably speaking Aryan dialects.
- (7) Vedic Aryans, or Nordics, leptorrhine dolichocephals who brought the Vedic Aryan (Sanskrit) speech
- (8) Mongoloids, brachycephals not important for the greater part of India, as they touched only the northern and eastern fringes

Finally, the most recent and authoritative view has been put forward by Dr. B. S. Guha, Director of the Anthropological Survey of India * In his newest work, giving a useful résumé of the whole question, Dr. Guha has signalized "six main races with nine subtypes," as follows:

- The Negrito
- 2. The Proto-Australoid.
- 3. The Mongoloid, consisting of:
 - (i) Palaeo-Mongoloids of (a)
 - (a) long-headed and (b) broad-headed types
 - (ii) Tibeto-Mongoloids.
- 4 The Mediterranean, comprising:
 - (i) Palaeo-Mediterranean.

RACE MOVEMENTS AND PREHISTORIC CULTURE

- (ii) Mediterranean, and(iii) the so-called Oriental type.
- 5. The Western Brachycephals, consisting of:
 - (i) The Alpinoid,
 - (11) The Dinaric, and
 - (iii) The Armenoid.
- The Nordic.

Of the above races, (1) the Negrito is all but extinct on the soil of India. A small group of Negritos is still surviving in the Andamans, and traces of the Negrito race have been found among the Kadars and Palayans of Cochin and the Travancore Hills, the Irulas of the Wynad, the Angami Nāgās of Assam and some of the Rājmahāl Hill tribes in Eastern Bihār. The Negritos appear to have been suppressed and absorbed by other races which followed them, particularly the Proto-Australoids (2).

(2) The Proto-Australoids appear to have come from the West, and have become characterized in india. They survive in a good many aboriginal peoples of present-day India, although more or less mingled with other peoples. A branch of the Proto-Australoids passed on to Australia in very ancient times, and the "Austronesian" peoples (Indonesians, Melanesians and Polynesians) have a good deal of the Proto-Australoid element in them. Throughout the greater part of India the Proto-Australoid peoples still live as the lower castes or sections of the Indian people.

- (3) Of the various (3) Mongoloid groups, (1) the Palaeo-Mongoloids, sub-divided into two types, (1) (a) with a peculiar head-form resembling dolichocephal, occurring "as the more ancient stratum of the population" and forming "a dominant element in the tribes living in Assam and the Indo-Burmese frontiers" and (1)(b) with round heads, found among the less primitive tribes in Burma and in the Chittagong Hills, appear to represent a less developed group of this race. The (ii) Tibeto-Mongoloids are a more pronounced and advanced Mongoloid type, and they are found in Sikkim and Bhutan, and "must have infiltrated from Tibet in comparatively later times."
- (4) The Mediterranean peoples also represent several strains or types, all long-headed We have in the first instance (i) the Palaeo-Mediterranean type, medium-statured dark-skinned and of slight build: this is found largely in the Kannada, Tamil and Malavalam tracts (ii) The true Mediterranean or European type, taller and fairer than the Palaeo-Mediterraneans. occurs in the Punjab and Upper Gangetic Valley, and is supposed to represent the civilized pre-Aryan "Dravidian" people of Northern India which became Aryanized in language and contributed largely to the evolution of the Hindu people and culture of North India (iii) The

third Mediterranean strain, the so-called 'Oriental onc, commonly miscailed the Semitic or Jewish, with a pronouncedly longish noise and fair in skin, is found in the Punjab, in Sind, in Rappusaha and in Western U.P., and it occurs also not unusually enough in other parts of India.

The various (5) Brachycephal groups really form sub-groups of one single physical type, and they appear (or at least their prototype appears) to have evolved in the Central Asian mountain regions. Brachycephalic peoples, both Alpine and Dinaric appear to have spread over the greater part of India, the Dinaric type being well-marked in Bengal and Orissa, in Kathiawar, and in the Kannada and Tamil countries; and in Coorg it occurs in its purest form. In Gujarat the Alpinoid brachycephals show a greater predominance. Broad-head elements are found along the West Coast of India, excepting in Malabar; they are not found in the Tolugo country. Early brachycephalic groups also established themselves in or passed through the Ganges Valley, as far as the delta, leaving traces or drifts in Central India, Eastern U.P. and Bihar, another line of migration is found along the Himalayas, from Chitral and Gilgit to Western Nepāl. The Parsis of Bombay are a lately arrived brachycephalic group allied to the Armenoids-they present a contrast to the long-headed Iranian Zoroastrians (Gabrs or Guebres) still living in Persia.

Finally, we have the (6) Nordic Arvan-speaking group of India. who gave to India its Aryan speech, and by their organization, imagination and adaptability helped to bring about a great cultural synthesis leading to the foundation of the Hindu civilization of India. These Nordics seem to have been characterised in the Eurasian steppe lands and they entered India some time during the second half of the second millennium B.C. Nordic elements are strong in parts of the North-West Frontier of India, particularly along the upper reaches of the Indus and along its tributaries the Swat, the Panikora, the Kunar and the Chitral rivers, and in the south of the Hindu Kush range. In the Punjab and Raiputana and in the Upper Ganges Valley Nordic elements are present (although more and more mixed with other racial elements as we proceed further to the east), particularly among the higher castes or groups; among cer tain sections elsewhere in India, the Nordic type predominates e g, among the Chitpavan Brahmans of the Maratha country. The original Nordic type is supposed to have been tall, fair-skinned, yellow or golden-haired and blue-eyed: such a type seems (from such meagre literary evidence as is available) to have characterized the true Arvans of ancient times, but owing to miscegenation and to climatic conditions the complexion of the body and the colour of the hair and the eye have been modified or eliminated by natural selection to light brown or brown and to black (for the hair and

RACE MOVEMENTS AND PREHISTORIC CLLTURE

the eyes), although light-eyed people are not uncommon among the Nordic long heads in India, scattered as they are all over the country.

Dr. B. S. Guha has thus summed up the racial distribution tor India as a whole: "It must be clearly understood that no rigid separation is possible as there is considerable overtapping or types. From a broad point of view, however, a Nordic territory in northwestern India, mixed with Mediterraneans and Orientals, can be distinguished from a territory in Peninsular India containing the older Palaeo-Mediterranean element. On both sides of this are the domains of the Alpo-Dinaries, mixed no doubt with other types. The primitive darker elements have come in everywhere and, with blood from other strains, chiefly Palaeo-Mediterranean, they constitute the lower stratum of the population. The Mongoloids occupy the submontane regions of the north and the east, but various thrusts from them have gone deeply into the composition of the people."

It has not yet been established that a particular racial type, by the mere fact of some pronounced or subdued racial characteristic which it possesses, must necessarily or inevitably have its mental and emotional outlook or attitude pre-decided. In other words, it cannot be asserted that there must be an ineradicable racial character. But on the other hand the economic milieu, and the special training which the mind and the emotions receive in an organized or corporate body of men, create a framework of civilization or ordered life which commonly finds an expression in the language of that body of men, and hence we are more justified in speaking of language cultures than of racial cultures, and we must also consider that from the beginning of recorded history racial inter-mixture has proceeded apace, leading to a profound modification of any special race-type in its most ancient and pristine form. The six different main types of humanity, with their various ramifications, as discussed above, which have gone to make the people of India, are now included within one or the other of four distinct speechfamilies viz , the Austric (Kol or Munda), the Tibeto-Chinese or Sino-Tibetan, the Dravidian, and the Indo-European (Arvan), Even in some cases the economic milieu transcends the diversity of language and language-culture, and tones down very largely. within a given economic area the more aggressively prominent or more easily noticeable special cultural traits that go with language -religion, social usage, customs, etc Thus in Chota Nagpur, in spite of diversity of language the Dravidian-speaking Oraons and the Austric (Kol)-speaking Mundas are within the fold of a common culture; and in Central Europe the Indo-European-speaking Germans and Slave, in spite of their pronounced linguistic diversity although within the same family, and the entirely distinct Finno-

Ugrian-speaking Magyars, share a common type of economic and cultural life. The same observation can be made about the Indo-European-speaking Armenians and Ossetes, the Ural-Altaic-speaking Azarbijanis and the Caucasic Georgians and others in the Caucasus regions.

So, too, for India as a whole, a more or less common type of economic life based on agriculture and taking shape within the limits of India forming a single geographical unit, combined with a large-scale comminging of different races building up a common history, has been responsible for the gradual modification of what doubtless existed in most ancient times as distinct racial types and distinctive language-cultures, and has led to the evolution, as a result of a more or less conscious movement, of a common Indian type and a common Indian culture. In this culture of India, after at least two and a half millennia of close interaction, the original genetic differences in the four language-families obtaining in India from prehistoric times have largely converged towards the evolution of a number of common traits

It will not be possible at the present moment to make a definite pronouncement about the mental and spiritual environment of the various types of man in their primitive stage when they came into India, although, through a close study of the question, taking all help from anthropology, religiology, linguistics, sociology, pre-historic archaeology, and other human sciences we may make some near enough guesses about their material culture and the contributions they made to the common store-house of Indian life and Indian civilization, both in the material and the mental and emotional sides. In this way we can bring to light the basis on which Indian civilization rests in all its aspects, material, mental, and spiritual, and its genesis will enable us properly to appreciate and understand its subsequent evolution and transformation.

We have to begin with the Negroid or Negrito people of prehistoric India, who were its first human inhabitants. At the present day the Negritos have practically vanished from the soil of India. Originally they would appear to have come from Africa through Arabia and the coast-lands of Irān and Baluchistān. They were in the eolithic stage of culture, and they appear to have been foodgatherers rather than food-producers. In India, the Negritos would appear to have been either killed off by the later immigrants, more advanced than themselves, notably the Proto-Australoids, or absorbed by them. They survive in a few primitive tribes in South India, and traces of the Negrito have been found in the Nāgūs of Assam. Beyond India, they passed on to Malaya, where Negrito tribes still survive and even further into the distant islands of Indonessia like the Philippines, and into New Gulnea.

Indian domain, they are found in a few hundred Andamanese in the Andaman Islands, where they have still kept up their own language. Their settlement in the Andamans shows a certain advance in culture, as they must have crossed the sea in their small diagouts, which testifies to their skill as well as courage and imagnation; and they came to be acquainted with the bow and arrow, and the blow-pipe, probably from the Proto-Australoids, unless they invented these themselves. Except in the case of the Andamanese, the Negritos who survive in India and Further India (including Malaya) at the present day speak everywhere debased dialects of their more civilized neighbours. The original Negrito speech of India, whatever it was seemingly survives in Andamanese, which is a language or dialect group stands isolated. Owing to their very primitive state, the Negritos do not appear to have contributed anything of importance to the civilization of India.

Negrito elements or traits, judging from some racial types depicted in the art of Gupta and post-Gupta India (as in Gupta sculpture and in the Ajanta itescoes), seem to have survived to a very late period, but now they have been almost wholly eliminated. It has been suggested that the cult of the ficus tree, associated with ferthity and with the souls of the dead, and some ideas about the Path of the Dead to Paradise guarded by an avenging demon, which are widespread in Southern Europe, Africa, and Oceania, and partly also India, might well have come from the Negrito people.

Situated as they were, the Negritos were not in a position to influence the languages which came to India subsequently. At least two other linguistic strata covered up Negrito speech-the Austric and the Dravidian, before the Arvan language arrived, so nothing from Negrito speech had much chance of coming into Arvan. But it may be that here and there a word indicative of some object, some element from the flora or the fauna of India, has survived, although in a much altered form, being passed on from the Negrito language through the Proto-Australoid or Dravidian dialects to Indo-Aryan One such word may be the Bengali and Oriya badud, bādadi = "bat": the basic element would seem to be *bād, which was extended by the addition of the pleonastic affix-ada-plus the feminine and diminutive affix-i from Old Indo-Aryan ikā, and with this *bad, otherwise unexplained, may be compared Andamanese wôt-da, wāt-da, wòt, wat="bat" and the element pet, wet, met, wed, wat, in some of the aboriginal languages of Malaya and Indo-China belonging to the Austro-Asiatic branch of the Austric family (some of which are spoken by the Negrito tribes of Malaya); e g tra-pet. sa-net, ham-pet, sa-met, hamet, ka-wet, ka-wed, gan-at-, kat < *ka-wat, kawa < *ka-wat, uôt.

The Proto-Australoids, who appear to have come after the Negritos, and that, too, from the West, have furnished one of the

basic elements in the population of India. There were, as it would appear, numerous lines of migration of this race from the west and east through India, and the Proto-Australoid type was modified both within and beyond by admixture with other peoples, notably the Negritos and the Mongoloids; and as a result, we have, it would seem, the Kol or Munda type in India, the Mon-Khmer type in Assam, Burma, and Indo-China, the Nicobarese in the Nicobar Islands, and the Indonesian Melanesian, and Polynesian types in the islands of the Indian Archipelago and those of Melanesia and Polynesia. All these congeries of mixed peoples extending from the extreme north-west of india, throughout the whole of India, Burma, Indo-China and Malay Peninsula into the islands of the Indian Archipelago (Indonesia) and those of Melanesia, Micronesia, and Polynesia-in a word, from Kashmir to Easter Island-have a Proto-Australoid element, and the languages they speak have been found to possess common traits which warrant their inclusion within a single speech family. The researches of Pater W Schmidt have established the Austric Family of Languages, which is found to have two main ramifications-(1) the Austronesian, under which come the closely agreeing Indonesian, Melanesian, Micronesian, and Polynesian languages, and (ii) the Austro-Asiatic, which embraces the Kol or Munda speeches of India, Nicobarese, and the Mon-Khmer speeches of India (Assam), Burma, and Indo-China

As things stand, the original Austric speech, which took different forms under diverse conditions within this vast area over which it spread, would appear to have been brought from the west by the Proto-Australoids, and in its original form (as the ultimate source of both the Austro-Asiatic and Austronesian branches) it could very well have been characterized within India. Outside India, the Proto-Australoids passed on to Australia, where their language and culture took a definite form which was quite isolated and distinct from that of the Austro-Asiatic and Austronesian peoples

After the Melanesian and Polynesian types in ethnology and language came to be established, it would appear that there were back-washes of immigrations of Melanesians and Polynesians into India, which brought in certain new cultural contributions from these peoples; and these Melanesian and Polynesian immigrants would appear to have now become totally assimilated into the mass of the Indian population From the Melanesians, the custom of disposal of the dead by exposure, communal houses, head-hunting and a canoe cult appear to have been introduced into India. The introduction of the outrigger canoe and of the coconut into India may have been due to the Polynesians.

The Proto-Australoid's contribution to the primitive culture of India, it has been thought, included the following matters: pottery, which would appear to have been unknown to the Negritos; neo-

lithic development of the palaeolithic culture of the country; the use of the boomerang and of the blowing-gun; and ideas of totemism in religion. Hoe and digging-stick cultivation, followed at least in some parts of the country by terrace cultivation of rice, may have originated on the soil of India in the hands of the Proto-Australoids; and this would appear to have been advanced largely in the extra-Indian lands of south-eastern Asia.

The bases of Proto-Australoid culture-assuming that the language of the Proto-Australoids was the primitive source-speech from which the current Austro-Asiatic and Austronesian languages have descended-can to a certain extent (apart from some prehisto-11c implements and artifacts3 which can be ascribed to the Proto-Australoids) be reconstructed through linguistic palaeontology. along lines which have proved to be so successful in the case of the primitive indo-European cultural milieu, Renward Brandstetter has, in his brilliant papers on Indonesian, essayed to reconstruct not only the primitive Indonesian speech (which comes within the Austronesian branch of Austric) but also the natural and mental background of the speakers of Primitive Indonesian. 10 For Austric (if not for Austric as a whole, at least for the Austric speech world of India) a new line of investigation has been started by Jean Przyluski, with full approval and support of Sylvain Lévi, Jules Bloch, and others. 11

In studying certain non-Aryan elements in the Indo-Aryan speech in its different periods-non-Arvan elements which are not Dravidian-Przyluski found out that these belonged to the Austro-Asiatic speeches as they were current in India At the present day, Austro-Asiatic dialects belonging to the Kol or Munda group only are spoken on the soil of India, and only one speech of the Mon-Khmer group is current in Assam, viz Khāsi, while other Mon-Khmer speeches are found in Burma and Indo-China But from a study of the Austric words found in Indo-Aryan it would appear that dialects allied to both Kol and Mon-Khmer were current in India during the oldest period of contact between Indo-Arvan and Austric, and possibly also speeches more closely connected with Austronesian (Indonesian specially) within the Austric family. However, from these non-Arvan (and non-Dravidian) loans which are from Austric we can make some guesses as to the nature of the culture-world which the Austric-speaking or Proto-Australoid peoples presented vis-à-vis the Arvan-speaking invaders from the West

The words from Austric borrowed by Indo-Aryan refer in the instance to items in the special flora and fauna of India not known to the Aryan-speakers; naturally enough, then, they also refer to culture plants known to the Austric-speakers, and to some of their culture objects and ideas Thus, the Aryans came into Iran (and possibly also into India) with a knowledge of barley and

wheat among cereals, their word for "barley," yove in Sanskrit, is of Indo-European origin (= Greek zea, I-E *yeva-), and that for "wheat" (Sanskrit godhāma, Persian gandam < Iranian 'gandhāma) is of unknown origin. For "rice," the oldest word in Indo-Aryan is vrīhi, which has Iranian affinities (eg Persian bring, gurinj, Old Iranian 'v>rn>ja, Paşto wri²e, whence Greek oruza, briza) and which may be connected with the Dravidian (Tamil) arichi <*arki, argi. But in the New Indo-Aryan languages the common word for "rice" is chāwal, chāwal, chāwal, and this would appear to be based on a Middle Indo-Aryan chāmala (cf. the Old and Middle Indo-Aryan incris chāma, ā-chāma) meaning "rice" as well as "food," and this chāma-la, in its original sense of "food," might be very well connected with Kol or Mundā root om, "to est "!".

Certain common fruits and vegetables may similarly be presumed to have been cultivated by the Austric speakers, as their Sanskrit and other Aryan names are of Austric origin the banana (Sanskrit kadali, kandali), coconut (nārīkela), betel (tāmbūla), the brinial or egg-plant (vatingana), the pumpkin (alabu), the lime (nımbuka), the rose-apple (nambu), ctc. and also cotton (karpasa, karpața) and silk-cotton (śālmalī, śimbalī) The domestic fowl (krikavāka, *kurkuta > kukkuta), the peacock (mrok as an expletive in the Atharva-Veda, compare Kol marak "pencock," beside Dravidian mayil as in Tamil), the elephant (matanga, gaja), and some breed of horse or pony (*sāda, as in Sanskrit sādin--"rider") appear to have been known to the pre-Arvan peoples of India speaking Austric. The Austric speakers supplied to Indo-Aryan its common word for "arrow" (bana), and for "stick and "phallus" or "the phallus symbol," both from a word mcaning originally "stick," and then "digging-stick for ploughing" (lakuta, laguda, linga, laudā in NIA-Bihari), and these show two noteworthy aspects of the cultural life of the Austric speakers which had their repercussion on that of the Arvan speakers.

Some of the fundamental bases of Indian civilization on the material side would thus appear to be the gifts of the Austric-speaking Proto-Australoid people the cultivation of rice, the raising of some important vegetables, the manufacture of sugar from the cane, and the use of the betel vine in life and in ritual, the habit of counting on the basis of twenty (Bengali kudi, Hindi kodi), and probably also the use of turmeric and vermilion in religious ritual and social life (eg in marriage), combined with some notions of future life (survival of the soul after death, and the germs of the idea of transmigration) and some mythological and religious as well as romantic notions and stories appear to have come from the same source. Weaving of cotton cloth was also an Austric or Proto-Australoid invention; and probably the Proto-Australoids were the first people to domesticate and train the elephant.

Certain magico-religious rituals, e.g the removal of the evil eve by the rite known in Northern India as nichhāwar or baran, which have a strong place in Hindu society, would seem to be of Austric origin. The idea of taboo would seem to be another trait derived from the mentality of the Proto-Australoids (or Austric speakers) in prehistoric times, when Arya and Nishāda-the Aryan and the dark-skinned Austric dwellers in the forests-first met in the Punjab: Sylvain Lévi has drawn our attention to the fact that the Atharva-Veda word tābuva was connected with the Polynesian word tapu or tabu by A Weber in 1876 and by Barth later on; and it is likely that the word passed on with the Proto-Australoid immigrants into Austronesia, the distant Polynesian islands, while in India it was borrowed in the Atharvaveda Cosmic and creational myths and ideas as they had originated among the pre-Arvan Austric-speaking peoples of India were adopted into the cosmopolitan or composite Arvan-non-Aryan or Hindu religion and legend, while these made their steady way into the oceanic regions of the Pacific through the islands of Indonesia with the expanding Proto-Australoids. Certain remarkable agreements between the cosmogony of the Polynesians and that of the Nasadiva hymn of the Rigyeda (X 129) have to be taken note of in this connexion. The enumeration of the days by the phases of the moon-the tithis-which was early adopted by the Hindu people probably simultaneously with its formation and has still been retained in the sacred or religious (ritualistic) calendar of the Hindus, is again an Austric custom which survived in Polynesia; even the old Austric names for two of the phases of the moon, which are still found in the Polynesian group of Austronesian were adopted in India by Sanskrit (rākā="full moon," and kuhu: "rew moon") 14 It has also been suggested that the Sanskrit name of at least one constellation is of Austric origin, viz matrika="the Pleiades," the present-day Polynesian form of which is matariki

The culture-world of India has thus among its material and other ideological bases some fundamental things derived from the Austric speakers, assuming that they were also, in their pure state, Proto-Australoid in race, which became fully characterized on the roil of India. That would be only natural, as this racial element forms one of the most important in the present-day Indian people, as anthropologists tell us, the masses or the lower classes throughout the greater part of India being largely of this stock. The bedrock of Indian civilization is agriculture and that, in all likelihood in connexion with the cultivation of rice, goes back to the Austric Proto-Australoids of India The germs of the idea of transmigration which has been so potent a force in Indian thought, religion and life, would probably go back to this source also some of the fundamental cults and rituals

In the domain of myth and legend, a number of Austric notions and tales appear to have survived in the myths of the Purāṇas and of the popular Hinduism. The legends of the creation of the world from an egg or eggs, of the Avatāras or incarnations of Vishiqu, eg, that of the tortoise incarnation, of the princess smelling of fish (matsya-ganāhā), of the Nāgas as serpent spirits of the waters and the underworld, and many more, which do not form part of the Aryan or Indo-European inheritance in Hinduism, and do not seem to have come from the Dravidian world either, can reasonably be expected to have been derived from the Austric or Proto-Australoid world

All these have been more or less distorted or transformed in the Sanskrit Purāṇas, in the traditions surviving among the Austricspeaking tribes of the present day, or in popular Hindu folklore of today. The use of a rude block of stone as a symbol of the divinity is also Austric—it may also have been Dravidian in addition. Some fairy or folk tales would also go back to the same source. Zoomorphic detites appear also to be survivals from Austric or Proto-Australoid totemism which also was reinforced by the Dravidian cults possessing a similar character (e.g. the Nāgas or snake deities, the tortoise, the makara or crocodile, the monkey god, Ganeśa with his elephant's head, etc.)

It would be too much to try to appraise the stamp of the original Proto-Australoid character upon that of our masses of the present day, but from the character of the present-day Kol or Munda peoples of Eastern India, and of the peoples like the Oraons whose cultural milieu is that of the Kols although they are Dravidian-speakers, we may be allowed to formulate this Austric inheritance. The Austric temperament was pre-eminently gregarious; it was superstitious and to some extent timid, though not cowardly in face of dangers it could understand. Cheerfulness and love of simple music and gaiety came naturally to the Austric temper even in the midst of hard labour; and it was not over-sensitive to physical discomfort There was a touch of erotic abandon in it, but along with that there was a great respect for convention which put the rein on licence As a sympathetic student of the aborigmes of Chota Nagpur, W. G. Archer, has said of the Oraons, who live within the same economic and cultural atmosphere as the Mundas, Santals, Hos, and other agricultural Kol tribes "A few notes should be added on Oraon 'character' To the earliest observers a capacity for cheerful hard work was the most notable character of Oraons; and a sturdy gaiety. an exultation in bodily physique and a sense of fun are still their most obvious qualities These are linked to a fundamental simplicity-a tendency to see an emotion as an action, and not to complicate it by postponement or cogitation... The final picture is of a kindly simplicity and a smiling energy,"15

In discussing the Austric or Austro-Asiatic speakers of India and their contribution to the make-up of the Indian people, mention should also be made of the theory of the Hungarian scholar William Hevesy (Hevesy Vilmos, Wilhelm von Hevesy, Guillaume de Hevesy). recently put forward in some books and papers in German and French, combating Pater W. Schmidt's theory of an Austric family of languages divided into two groups, Austronesian and Austro-Asiatic (the latter including the Kol or Munda languages of India).16 Hevesy has challenged Pater Schmidt's view that the Munda or Kol peoples speak dialects which are members of the Austro-Asiatic branch of Austric, he denies the existence of an Austric speech family, and he proposes quite a different affinity for the Kol or Munda languages, viz Finno-Ugrian. Hevesy's views were put forward for the first time in 1930, but so far they have met with neither any general or wide acceptance nor a thorough or systematic refu-According to Hevesy, Munda or Kol belongs to the Finno-Ugrian speech-group, under which come Magyar or Hungarian, Finn in its various dialects, Esth of Esthonia, Lapp of Lapland, and Vogul, Ostyak, Zyrian, Votyak, Cheremis, Mordvin and Samoyed of Russia and Siberia Hevesy believes that there was a prehistoric invasion of or immigration into India by Finno-Ugrian or Ugrian tribes from the Eurasian plains to the south of the Ural Mountains, and the Mundas or Kols with their language resulted from a mixture of these Ugrians with the earlier peoples of the country, the Negritos and the Proto-Australoids. Hevesy bases his view on certain points of agreement between the Kol speeches on the one hand and the Finno-Ugrian speeches on the other-points of agreement which have not been admitted by any competent linguistician who is equally at home in Kol and in Finno-Ugrian (and such a person would be exceedingly rare to find) The points of cultural similarity between the Kols and the Finno-Ugrians as proposed by Hevesy are not convincing There might have been an Ugrian influx into India, in very ancient times, but there is nothing positive to establish it

The Austric linguistic zone has been conjecturally extended further to the west of India by Jean Przyluski and others, who see in the Sumerian speech of Chaldea a language allied to primitive Austric Przyluski has even seen an Austric substratum in Indo-Iranian certain words like Sanskrit våla: Persian bål "hair." Sanskrit blishay: Avestan bisza "doctor." "healing," as connected with Sanskrit obiah "poison," etc. Przyluski explains as being from the Austric, which would appear to have influenced Iranian also. ¹⁶ But this. too, cannot be described as satisfactorily established. We may admit the possibility of Sumerian and Austric being related, for we have to remember that the Proto-Australoids, who are supposed to have been the original speakers of Austric, were a very

ancient offshoot of the Mediterranean race, and as such in their trok to India where they became specially characterized they may have left some of their tribes on the way, or some of their kinsmen might earlier have preceded them and had established themselves in Mesopotamia. to become the Sumerians who built up the basic culture of that part of the world. But even then it seems that India was the centre from which the Austric speech spread into the lands and islands of the east and the Pacific; and the theory that there is actually an Austric Family of Languages in its two groups of Austronesian and Austro-Asiatic, as propounded by Pater W. Schmidt, may be said to hold the ground still

The Austric Proto-Australoids were spread over the greater part of India In the Indus and Ganges valleys when the Arvans first met them, they were known as Nishādas, and their dark skin and snub noses were held in ridicule by the fair and straight-nosed Aryans. The masses of agricultural Austrics in the North Indian plains from Afghanistan to Eastern Bihar gradually became Arvanspeaking, roughly between c 1500 B C (about when the first Arvan invasion or land immigration into India took place) to c 600 B C. a little before the time of the Buddha: but even in the time of the Buddha, pockets, large or small, of non-Arvan (Austric and Dravidian) speakers still remained throughout this tract. We find, for example, in the Buddhist Jatakas, mention of Chandala villages where they still employed the Chandala tongue, a supposed word from which is given-giligili-in the Chitta-sambhūta Jātaka Through the contact of Aryan and Austric, and through large masses of Austric speakers abandoning their native speech, the Aryan speech came to be affected, in phonetics, in vocabulary in morphology and in syntax The question of vocabulary, as said before, has been taken up for study, and beginning with the pioneer researches of Jean Przyluski in this field, we are gradually being enabled to find to what extent Austric vocables have found a place in Indo-Aryan in its three stages of Old Middle, and New Indo-Aryan Place-names in North India (and undoubtedly also in the Deccan and South India) show Austric elements, thus indicating the presence of Austric speakers in the localities with these names A name like Gangā is in all likelihood of Austric origin, and it appears to have meant just "a river" as in its modern Bengali equivalent gang = "river, channel" Original Austric speakers form a substratum in Burma, Indo-China and South China also, and the Indian Ganga, gang, the Indo-Chinese Khong as in Me-khong, and the South-Chinese Kiang < *Kang < *Ghang (as in Yang-tsze-Kiang and a dozen other river names)-all of these can very well be from the same old Austric word, now lost to most of the Austric tongues

We may next take into consideration the cultural world of the Dravidian speakers with special reference to its contribution to the

formation of the ancient Hindu world. Anthropologists, as noted before, assume at least three varieties or modifications of the Mediterranean race as having come to India, and all of these would appear to have been speakers of Dravidian, at least in India—the Palaeo-Mediterraneans, the Mediterraneans proper, and the so-called "Orientals." They were all long-headed, and they came to India with a fourly high level of civilization As contrasted with the Proto-Australoids or Austrics, whose culture was mainly a village culture based on agriculture, these Dravidian-speaking Mediterranean peoples (in their various ramifications) in India were responsible for cities and a city culture—for a real civilization, in the true sense of the word including international trade

The Dravidian speeches of the present day stand apart in a group by themselves, and although structurally they agree with some other speech families (e.g. with the Ural-Altaic family, which includes the Altaic speeches like Mongol, Turki, and Manchu on the one hand and the Ural or Finno-Ugrian speeches like Magyar. Finn, Esth, Lapp. Ostyak, Votyak, Zyrian, Cheremis, Samoyed, etc. on the other, in both Ural-Altaic and Dravidian possessing the same "agglutinative" structure in word-formation), in their roots, words, and affixes they do not agree with any current group of languages There are fundamental points of difference between Dravidian and all the other speech-families which are current in India-the Austric, the Sino-Tibetan and the Indo-European (Aryan) The Dravidian tengues now form a solid bloc in the Deccan and South India to the south of the sixteenth latitude; and between the twentyfourth and sixteenth latitudes apart from the massive bloc of Telugu in the centre and the east and that of Kannada in the west. there are large Dravidian patches like Gondi, Kui, and Oraon which have been broken up a very great deal by the infiltration of the Arvan dialects

But there is evidence, both indirect and direct, that in Central India, in North India, and in Western India, and possibly also in Eastern India, Dravidian was at one time fairly widespread. In Baluchistām we have the bloc of the Brāhui speech, which is Dravidian; and it is quite conceivable that the Brāhui area is just a surviving fragment of a very wide-spread Dravidian tract which extended from Baluchistān and Sind through Rājputāna and Mālwā into the present-day Marāthā country and the Dravidian lands of the south, and which also extended north and north-east in the Punjab and the Ganges valley, and possibly also north-west through Afphanistān into Irān into Irān

Survival of Dravidian vocables in the place-names of Northern India, interpretation of the references to non-Aryan peoples or tribes in Vedic and other ancient Indian literature, the presence of a strong Dravidian element in the Aryan language from the Vedic

downwards, the gradual "Dravidization" in spirit of the Aryan language leading to a very large approximation of the Modern or New Indo-Arvan languages to the speech-habits of Dravidian, the Dravidian character of a good deal of the extra-Indo-European elements in Hindu religion, ritual and thought mythology and legendary history, and the discovery of a Mediterranean type in the people of the Upper Ganges Valley-all these are strong evidences in favour of an assumption that Dravidian speakers were largely to be found in the Puniab and the Upper Ganges Valley also; and toponomy and cultural survivals would point to an extension of the Dravidian speakers further eastward into Bengal, although here the long-headed Austrics and a brachycephalic people seem to have largely intermingled. In the North India plains, more than anywhere else, the Dravidian and Austric peoples appear to have been living side by side; probably there was at first a Dravidian element ruling over the Austric, and this was leading to a cultural and racial fusion.

The want of a solid bloc of Dravidian speakers or of Austric speakers in the Punjab and Upper Ganges Valley—the fact of the land being inhabited by peoples of these two different languagecultures—gave to the Aryan speech with its own culture-world its greatest opportunity, so that within a few hundred years after the Aryan language had been established in the Punjab, it could spread as far as eastern Bibār, ousting the earlier pre-Aryan speechas and gaining greater momentum as its area extended east and south

We are not absolutely certain that the city-builders of Harappa and Mohenjo-daro in South Punjab and Sind, whom the Aryans doubtless encountered, spoke Dravidian, but there is a balance of probability that they did. This matter cannot be proved or disproved until we find the clue to the script in the hundreds of seals found at Harappa and Mohenjo-daro and other sites The Rev H Heras, S J has sought to read Old Tamil in these seals from the South Punjab and Sind but it is highly improbable that in epigraphs from a culture-age going back to, say, 2500 B C, there should be found a language which is not much older than A D 500. For although the oldest of the Chen-tamizh or Old Tamil works in their original form may go back to the centuries round about the time of Christ, the language which is found in them is considerably later Moreover, we have to take note of the fact that Old Tamil in its phonetics represents a very much decayed form of the primitive Dravidian speech, which-or something like which-can alone be expected to have been in use in the third millennium B C, the anproximate date for the Mohenio-daro culture. For example, the word Tamil itself: tamiz, it has been very conclusively established, was pronounced *damiz in the early centuries of the Christian era. and earlier, in the first half of the first millennium B C it was in

all likelihood "dramiza, which was adopted into Sanskrit as Dramija, Dramija, Dramija, Dramija, Dramija, before the Christian era. All other attempts to read right away, with the help of Sanskrit for instance, the South Punjab and Sind seals need not be taken into serious consideration.

The Aryan invaders or immigrants found in India two groups of peoples, one of which they named the Dasas, and Dasaus, and the other Nishadas. The Dasa-Dasyu people evidently had ramifications or extensions in Iran as well, we have in the south-east of the Caspian the Dahai people noted by the Greeks, and Daha is but the Iranian modification of Dasa, and in Iranian the word dahyu (whence Modern Persian dih) was in use, meaning "country" or "the countryside," which would only appear to have been originally a tribal name, the Iranian equivalent of the Indo-Aryan dasur, generalized to mean the "country" only. In India the words dasa and dasuu changed their meaning-as names of the enemies of the Arvans offering them resistance, who were frequently enough conquered and enslaved, and these words came respectively to mean "slave" and "robber." The two names appear originally to be related, both being from a root or base das or das the words may after all be Arvan or Indo-European in origin-cf. Sanskrit dasat: "follows up", and likely equivalents of this Indo-Arvan root occur in other Indo-European languages. We should note similar semantic changes in Europe, how the Slav national appellation Slavu (meaning "glorious, noble") came to be transformed into the word slave (as in English), and how the Celtic tribal name Volcae became *Walx- or "Walh- in Germanic, and then came to signify "any foreign people." and gave rise to names like Wales, Wallachia, Walschand (= "Italy." in German) and names of peoples like Welsh and Vlach The Dasa-Dasyu (- Daha-Dahyu) people would appear to have spread from at least Eastern Iran through Afghanistan to North-Western and Western India--Punjab (and probably the Western or Upper Ganges Valley) and Sind-when the Aryans came into India There is no indication from the Rigveda that the Arvans were conscious of entering a new country when they came to India. This was certainly due to the fact that they did not find any appreciable difference in the non-Aryan people they encountered in India from the non-Arvan people they knew in Eastern Iran It is also equally likely that racial and cultural fusion (including linguistic influencing) had commenced between the Arvan and the Dasa-Dasyu peoples 100 outside the soil of India itself-in Iran, in all likelihood. The Vedic speech '6r already shows a number of words which are non-Aryan words with Dravidian affinities, and shows at least in its phonetics a profound modification on the lines of Dravidian by adopting or developing the cerebral sounds (t d n l sh) which are so distinctive of Dravidian

When the hypothesis of an Aryan invasion and occupation of

India was first proposed some four generations ago, it was believed that the white-skinned, blue-eved, and golden-haired Aryans, like their kinsmen of Northern Europe, entered India from the plateau of Central Asia, which was then a land of romantic mystery, came to this land of the black-skinned non-Aryans, made an easy and matter-of-course conquest of them, and imposed upon an inferior race or races their superior religion, culture, and language believed that all the better elements in Hindu religion and culture -its deeper philosophy, its finer literature, its more reasonable organization, everything in fact which was great and good and noble in it-came from the Aryans as a superior white race; and whatever was dark and lowly and superstitious in Hindu religion and civilization represented only an expression of the suppressed non-Aryan mentality This view is now being gradually abandoned It has been generally admitted, particularly after a study of both the bases of Dravidian and Arvan culture through language and through institutions that the Dravidians contributed a great many elements of paramount importance in the evolution of Hindu civilization which is after all (like all other great civilizations) a composite creation and that in certain matters the Dravidian and Austric contributions are deeper and more extensive than that of the Aryans The pre-Aryans of Mohenjo-daro and Harappa were certainly in possession of a higher material culture than what the seminomadic Arvans could show

The assumption that the Mohenio-daro and Harappa people spoke a primitive Dravidian speech accords best with the subsequent trend of Indian history and civilization From various aspects. a mediterranean origin of the Dravidian people, its religion and civilization appears to find good support Reference may be made in this connexion to the city culture of Harappa and the ancient cities of Sind described in the next chapter. On the positive side the cult of Siva and the institution of Yoga appear to have been characteristic of the religious life of the people of Sind and South Punjab The Aryans knew of a Sky Father-Duaush Pita-and of an Earth Mother-Prithvi Mātā-but these divinities were vague nature delties, who merely typified the falling of the rain from the sky to help earth to produce corn and fruits. The Kols (e.g. the Santāls) had similarly a Sun gcd (Siñ Bonga) and a Moon goddess (Ninda Chando) who were the great Father and Mother deities in the Kol pantheon But the Dravidians had a conception of the forces of Life and of the Universe in the forms of a Great Mother Goddess and her male counterpart a Father God, and this conception, which was more profound, more mystic, more all-embracing and more deeply philosophical as well as more poetic than the simple Arvan idea of a material Sky Father and an equally material Earth Mother, the Dravidians appear to have brought to India from their original

homeland in the islands of the Ægean and the tracts of mainland along the Ægean Sea—Greece and Asia Minor. Mã or Kubělė (Cybele) and Atthis, or Hepit and Teshup, the great Asianic Mother Goddess and Father God, the former having as her symbol or vehicle the lion, the latter the bull, form undoubtedly one of the bases on which the Siva-Umā cult of Hindu India grew up

From linguistics, it can be reasonably assumed that the oldest form of the word Tamil or Dravida (which we can trace) was probably *Dramila or *Dramiza. We find that the Lycians of Asia Minor, a pre-Indo-European Mediterranean people, called themselves in their inscriptions (written in their own speech in a script allied to the ancient Greek) Transals Herodotus has noted that the Lycians originally came from the island of Crete, and that in Crete the pre-Hellenic Asianic people were known by a name which the Greeks wrote as Termilai. It would not perhaps be too much to assume that some at least of the Dravidian speakers of India who came ultimately from the Eastern Mediterranean tracts brought with them one of their national or tribal appellations Termilai-Timuili-Diamiza, which became transformed into the modern name Tamil by the middle of the first millennium A D. In South Sind, the Greeks noted a people called Arabitas, they might very well have been Dravidian speakers in the fourth century B.C., and the name suggests the one which the Telugus apply to the Tamilians -Aravalu and Arava is explained scholastically as the Sanskrit word a-rava "speechless, voiceless," suggesting the unintelligibility of Tamil as a language for the Telugus Be that as it may, the culture-world presented by Dravidian (Tamil) linguistic palaeontology gives a fairly high background of civilization, which can be compared with what has been unearthed at Mohenio-daro and other places, and with such indirect references to non-Arvan (Dravidian) civilization and non-Aryan milieu as can be found in the Vedic writings In 1856. Bishop Caldwell gave the following sketch of the pre-Ayan civilization of the Dravidians from the evidence of the words in use among the early Tamilians1 (I give the Tamil words within brackets after the English words). The Tamils or Dravidians "had 'kings' (kō, vēntan, mannan) who dwelt in 'strong houses' (kottai, aran) and ruled over small 'districts of country' (natu) They had 'minstrels' (pulavan) who recited 'songs' (cheyyul) at 'festivals' (kontattam, tiraviza); and they seem to have had alphabetical characters (ezuttu) written (varai) with a style (iraku) on palmyra leaves (olai), and a bundle of leaves was called a 'book' (etu); they acknowledged the existence of God, whom they styled Ko or king-a realistic title known to orthodox Hinduism They created to his honour a 'temple' which they called Ko-il. God's house (kōyil, kōvil). They had 'laws' and 'customs' (kattalaı, pazakkam), but no lawyers or judges. Marriage existed among them

Iney were acquainted with the ordinary metals, with the exception of 'tin,' 'lead' and 'zinc,' with the planets which were ordinarriv known to the ancients (e.g. vell; = 'Venus,' chevvay = 'Mars,' viyāzam='Jupiter') with the exception of 'Mercury' and 'Saturn'. They had 'medicines' (maruntu), 'hamlets' (palli) and 'towns' (ūr, pettai), 'canoes,' 'boats,' and even 'ships' (small 'decked' coasting vessels-ton, otam, vallam, kappal, patavu) no acquaintance with any people beyond the sea, except in Cevlon, which was then, perhaps, accessible on foot at low water; and no word expressive of the geographical idea of 'island' or 'continent.' They were well acquainted with 'agriculture' (er--'plough,' velan-mai 'agriculture'), and delighted in 'war' They were armed with 'bows' (vil) and 'arrows' (ampu), with 'spears' (vēļ) and 'swords' (vāl). Ali the ordinary or necessary arts of life, including 'spinning' (nul), 'weaving' (ney), and 'dyeing' (niram) existed among them They excelled in 'pottery,' as their places of sepulture show." The late Professor P. T Srinivasa Aivangar (Ivengar) compiled a remarkable work, on the basis of native Dravidian words in Old Tamil, he has given us a most detailed survey of the type of culture in all its ramifications which obtained among the Primitive Tamil or Dravidian people before they began to come under the influence of the Arvan speech and culture.

Hindu tradition is vaguely conscious of Hindu religious ideas and philosophy, practices and ritual falling under two great categories—#gama and nigama. Nigama stands for the Vedic, 1e the pure Aryan world of ideas, centring round what has been called the Vedic kamakāṇḍa, the practical religion of Vedic inspiration in which the homa or fire-sacrifice to the gods of the Vedic world forms the most noteworthy thing Agama indicates what may be described as the Taitric and Puranic domain of religion and ritual, and it includes yoga as a special form of mystico-religious ideology and practice Pure Nigama religion is what we see in the great Vedic sacrifices which are still performed from time to time Agamic religion and ritual is largely influenced by the Nigamic or Vedic, but it forms a world apart

In ordinary Hindu usage, there is a good deal of compromise between the two Take, for example, the distinctive Hindu ritual of the pājā, by which we mean the worship of an image or a symbol of the divinity by treating the latter, after it has been consecrated, as a living personality, and bringing before it, as before a living being, cooked food, vestments, ornaments, and other offerings which are usable by a man and showing grateful worship by offering to it flowers the produce of the earth, and incense, and by waving lights in front of it and playing and singing before it This is something which is quite different from the Vedic rite of the homa, in which a wood fire is lighted on an altar and certain offerings of food in the

shape of meat and fat, butter and milk, cakes of barley, and soma or spirituous drink, are offered to the gods, who are not at all symbolized by an image, but are supposed to dwell in the sky and to receive these offerings through the fire.

The characteristic offerings in the puja rite, viz. flowers, leaves fruits, water, etc., are not known to the homa rate, except in instances where it has been influenced by the pujā. It has been suggested with good reason that pūjā is the pre-Arvan in all likelihood the Dravidian, form of worship, while the homa is the Arvan and throughout the entire early Vedic literature, the pura ritual with flowers etc offered to an image or symbol is unknown. The word pūjā, from a root pūj, appears, like the thing it connotes, to be of Dravidian origin also. This word or root is not found in any Aryan or Indo-European language outside India Professor Mark Collins suggested1 that the Sanskrit word puja (from which the root puj was deduced later) was nothing but a Dravidian pū "flower" plus root 'ge "to do" (palatalized to je), which is found in Tamil as chey, in Kannada as ge and in Telugu as che pūjā < "pū-ge, "pū-che was thus a "flower ritual," a "flower service," a pushpa-karma, just as homa described as paśu-karma or religious service entailing the slaughter of an animal Jarl Charpentier of Sweden derived paid from a Dravidian root pusu meaning "to smear," as the smearing of sandalpaste or blood forms an important item in the pujā ritual. But the use of blood, to be smeared over a piece of stone representing a god or spirit-the blood of a sacrificed animal being later replaced by red paint like the vermilion-would appear more to be an Austric or Proto-Australoid rite than Dravidian

In any case, the pre-Arvan, and in all likelihood Dravidian, origin of this most noteworthy ritual of a finished Hindu religion. would appear to be quite reasonable to assume. In the present-day texture of Hindu culture and religion the warp appears to be Dravidian and the weft Aryan Pūjā with flowers, leaves, and water was, so far as the first Arvans who came to India were concerned. an alien rite, a local "native" usage, not to be approved, much less adopted, by the Brahmanas and others who claimed to be true Arvans But "Greece captured her captor". The native or local cults and creeds did not die-on the other hand the exotic homa largely became moribund, being kept up artificially among limited groups of Brāhmanas and Kshatriyas, and the pūjā came to assume its present important place in the religious life of the mixed Hindu people which resulted from the fusion of the Aryan and the non-Aryan. The first conscious attempt to give the imprimatur to pūjā as a rite, which is to be taken sympathetically, we find in that great work of synthesis in Hindu thought and life, the Bhagavad-Gita of the Mahabharata, which would appear to have been compiled round

about the age of Christ; although through certain surreptitious rites like $k\bar{a}k\bar{a}$ -bat or offerings to crows and other birds, something analogous to the $p\bar{u}j\bar{a}$ was being given a place in the Grihya or domestic rites of the blue-blooded Aryan householders The $Gt\bar{a}$ passage (IX. 26) runs thus.

patram pushpam phalam toyam yo me bhaktyā prayachchhati, 1ad - aham bhakty-upahritam = aśnāmi prayatātmanah

"If anyone offers me with devotion a leaf, a flower, a fruit, and water I receive that, offered in devotion by the person whose soul is discollined"

The context makes it clear that here we have an apology for non-Vedic worship vis-à-vis the Vedic fire-sacrifice this verse, in fact, forms the great charter for the pūjā ritual within the milieu of Vedic Brahmanism

The acceptance of pre-Aryan (Dravidian) ritual meant also the acceptance of the conception of the divinity and of the mythological figures of the gods and goddesses which were current among them. In mediacval and modern Hinduism, certain divinities stand paramount like Siva and Umā, Vishņu (specially in his incarnations of Rama and Krishna) and Sri, together with some other gods and goddesses of a secondary character who claim the homage of the people like Hanumant, Ganesa and Sitala The popular gods of the Vedic Aryans-Indra, Agni, Varuna, Soma, Surya, Ushas, Pūshan, Parianva and the rest-gradually recede into the background, and a group of more puissant and more personal gods, more profound and cosmic and more philosophical in their conception, the Puranic gods of Hinduism headed by Siva-Uma and Sri-Vishnu, become established. As it has been said before, Siva and Uma are in all likelihood fundamentally of Dravidian origin, and as such, they are the Indian modification-and philosophic sublimationof the great Mother-Goddess and her consort of the Mediterranean peoples. The name Swa has been explained as being at least partly of Dravidian origin: in Tamil, for instance, Sivan (Chivan) means red, and the divinity was known to the early Aryans as Nila-lohita 'the Red One with blue (throat)" (referring to the legend found in the Puranas of later times and unquestionably mentioned in Rigveda, (X 136, vii), of Siva having drunk up the world poison and preserved it in his throat which became marked with blue for this). Sambhu, another common name or epithet of Siva, has been compared with the Tamil chempu or sembu meaning "copper," e, "the red metal." Siva and the Vedic Rudra have been identified. it is just likely that the name of the Red God of the Dravidian speakers, the most important divinity in their pantheon, was first rendered into the Aryan speech as *Rudhra, and then this name was easily identified with an already existing Aryan Storm God, the

father of the Maruts or the Storm Winds, whose name Rudra at Arvan meant quite a different thing-"the Roarer" (from root rua).20 The name Uma recails Ma, the Great Mother of the Asianic and East Mediterranean peoples; and Durga, as one of the common epithets of the Mother Goddess Uma, we can compare with Tragas. a deity mentioned in the Lycian inscriptions of Asia Minor.21 Vishnu is partly Aryan, a form of the Sun-God, and partly at least the deity is of Dravidian affinity, as a sky-god whose colour was of the blue sky (cf. Tamil, van "sky" and the Middle indo-Aryan or Prakrit form of Visnnu, which was vinnu, venhu). Sri is, to start with, an Aryan divinity, the Indian counterpart of the Goddess connected with the harvest or corn and with wealth, beauty, and well-being, whom we find in the lialic world as Ceres among the Latins. But in her association with Vishnu, as Gaja-iakshmi for instance, she is indigenous and pre-Aryan. " Krishna (in Prakrit Kanha, in Tamil Kanhan) is a demon opposed to Indra in the Rigveda, according to P. T. Srinivasa Aivangar, he represents, partially at least, a Dravigian God of Youth, who has later been identified with Vishou as an incarnation of his.

Another Dravidian God of Youth and youthful powers, of bra very and war, was Murukan, who in the composite Puranic mythology became Kumāra or Skanda, the son of Siva. 4 Ganeša, the elephant-headed demon who was to be appeased at the outset of any function to avert supernatural hindrances, remained such a demon with the Mahāyāna Buddhists, but with the Brahmanical Hindius he was transformed into the benign god who removes obstacles and who typifies wisdom. The very character of the god as having an elephant-head shows his native Indian, i.e. pre-Aryan origin.

The phallic symbol of Siva, the lings, appears to be, both in its form and name, of Austric or Proto-Australoid origin. We should remember that the mysterious upright conical stones set up on the ground (like the menhirs in the Celtic areas in Europe) were very much in evidence as cult objects among the Mon-Khmers and the Kols, and these bore a resemblance to the digging stick used among them as a primitive plough; and Jean Przyluski has shown, as it has been noted before, how the words linga, lakuta, laguda, langula are of Austric origin. But the figure of Siva as the great Yogin. seated in vogic meditation as Virūpāksha or "the terrible One" as Pasupate or "the Lord of Animals, or Souls," as Urdhva-linga or "the One with the erect creative force."-in fact, all the deeper and more philosophical traits in the conception of Siva appear to have been known among the Mohenjo-daro people, as shown by the very important seal with the figure of a divinity who can only be identified with Siva of later times.25 And assuming that the Mohenio-daro and Harappa people were Dravidian speakers, this would be only another corroboration of the Siva idea and the Siva

165

legends being of Dravidian origin: only this symbol of the Lenga in the gauri-paga or yora being derived to some extent from the Austric menhirs, which survived till recently in the Mundā sasan-diris or iamily burial stones.

Zoomorphic divinities, or lower animals as typitving the forces of nature and supplying symbols or figures for the supernatural or the godhead, appear to have been known to the Arvans only to a limited extent. Thus Indra and other powerful gods have been compared with bulls or rams, and Agni with the horse, and there is also the divine horse named Dadhikravan in the Veda. the extent to which zoomorphic deities came into prominence in Puranic Hinduism is something noteworthy, rivalling the ancient Egyptian pantheon in this respect. The submerged totemism of the Proto-Australoids possibly was the oldest and most powerful source of influence for this, and the worship of the Nagas or serpentine deities and water spirits would appear to have come from the Proto-Australoids. Garuda as the vehicle bird of Vishnu is partly a divine eagle-Suparna-of the Aryans and partly of Dravidian or Mediterranean origin; the name would appear to be Dravidian (cf. Tamil kazu "kite, eagle"). The sacredness of the ox and the cow may have some Arvan elements in it, but the honour paid to the cow among the Iranian Aryans might be, at its basis, of Dasa-Dasyu origin, as much as in India.

The great zoomorphic deity of India is of course Hanumant, the so-called Monkey-God. His greatness has no doubt been added to in later times by the Bhakti school of mediaeval Hinduism which saw in him an ideal devotee of Rama, God incarnate as the hero of the Rāmāyana legend. But in popular belief throughout the greater part of India (in Bengal alone his worship is not so intensely popular), he is something more than a simple Bhukta or devotee. He is a fertility deity, who gives children to barren women; and he is the helper at need and remover of obstacles. It seems, as F.E. Pargiter's significant research26 into the name of Hanumant warrants us in assuming, that there was a great Monkey-God who obtamed the worship of the pre-Aryan peoples (namely Dravidians) of India, and whose name was in the Dravidian speech just "the Male Monkey" (in Tamil, An-manti). The Aryan speakers came to know this god, and his name was at first translated into the Aryans' language as Vrishū-kapi. His worship was slowly entering by the back-door among the Arvan speakers through contact with the Dravidians, and this was resented by a certain element among the Aryan people: but others were acquiescing in the introduction of this "native" cult. An echo of this ideological conflict we find in the Vrishā-kapi hymn of the Rigveda (X. 86). But Vrishā-kapi became admitted into the newly formed Aryan-non-Aryan pantheon, and his original Dravidian name An-manti, as in Tamil, was

then Sanskritized into Hanumant, and under this name he is still a powerful detry in popular Hinduism, the sublimation of his character by Bhakt: adding but fresh lustre to his pristine popularity as a strong helper in need and remover of distress, the rough and ready god of a primitive people.

The extent to which the Arvan religion has been modified by Austric and Dravidian contacts is sufficient indication of the profound influences exerted by the latter in the evolution of the Hindu religion. There has been a widespread racial mixture, as anthropology has indicated. In culture, speaking in the Indian way, one may say that over twelve annas in the rupee is of non-Aryan origin. The bases of Indian economy-food (rice or wheat or millet with pulses or lentils as relish, milk products like ghee and curds, vegetables, occasionally a little goat or mutton, and fish and oil of various sorts where milk is not common, as opposed to the Aryan meal of barley cakes and meat and butter), dress (unsewn cotton cloth worn in three pieces as dhoti or sari i.e. loincloth, dupatta or shawl. and head-cloth or turban, in place of the woollen garments of the Aryans), and dwelling, are pre-Aryan, our way of thinking is un-Aryan-the syntax of the later Indo-Aryan dialects agrees more with that of the Dravidian languages than with that of Vedic and of the extra-Indian Indo-European languages; our counting and computation is largely on the basis of eight, which is Dravidian (Mark Collins has explained ompattu the Tamil word for "nine" as being really the Aryan una "one less" plus Tamil pattu "ten," and the Telugu tominidi as really meaning "broken ten" thus suggesting that eight was the common number in computation), combined to some extent with counting by tens, which is Aryan, and to a slight extent on the basis of twenty as the highest number, which is Austric (as Jean Przyluski has shown). Many of our social institutions and conventions (e.g., certain usages regarding prohibited degrees in marriage, and customs like a wife being on familiar terms with her husband's younger brother but regarding his elder brother as her father) and a good many of our wedding and other customs (e.g. the practice known as stri-āchāra with its attendant paraphernalia of the various produce of the earth arranged in a winnowing fan, the use of turmeric and vermilion in the wedding ritual, the employment of the coconut and betel-leaf in many of our ceremonies) are of non-Arvan origin. We have a fairly extensive element from the Austric and the Dravidian languages in our Indo-Aryan speech: the number-at least a hundred for Austric, and some four hundred and fifty for Dravidian as given by Kittel in his Kannada Dictionary-seems to be on the way to increase the more our knowledge of this matter is deepening and widening. In their phonetics, Indo-Aryan, Austric and Dravidian have converged more or less to a common Indian sound-system Despite a number of

nateworthy differences due to original diversity of race and speech and to climatic and economic conditions, the bases of Indian pre-Aryan (Austric and Dravidian) life and culture, modified by the language and ideology of the Aryans, and later by the ideology of Islam, still remain, and they form a specifically Indian background for a civilization and an outlook that may be described as pan-Indian.

The discovery of Mycenaean artifacts in Greece has proved the truth of what the great explorer of Ægean culture. Sir Arthur Evans, had suspected that a good deal of the heroic legends of Greece as well as of the legends of their gods and goddesses was of pre-Hellenic, i.e. pre-Indo-European, Ægean or Mcditerranean origin, and these were simply Hellenized by being rendered into the Indo-European language of the Greeks as soon as this language became established on its new territory. The stories of the lliad and the Odyssey and of Œdipus and other heroes were according to this view of Ægeen (rigin, and this has been corroborated, in spirit at least, for some other connected legends. A similar thing appears to have taken place in India. Myths and legends of Gods and Heroes current among the Austrics and Dravidians, long antedating the period of Arvan advent in India (c. 1500 B.C.) appear to have survived the Aryan impact and to have been rendered into the Aryan language in late and garbled, or "improved," versions accommodating themselves to the Aryan God- and Hero-worlds, and it is these myths and legends of gods, kings, and sages which we largely find in the Puranas. The Rama legend looks like a blend of three distinct stories without any historicity put together at different times (the Ayodhya intrigue and the banishment of Rāma, the abduction of Sitā and her recovery by Rāma, and the episode of the monkey princes), and seems to have grown up in Eastern India, with an Austric background; but later it was reedited as a national poem within the gorgeous framework of the composite and highly complex Hindu civilization of 2000 years ago The Mahabharata story, on the other hand, which developed in the Midland (present-day Western United Provinces and Eastern Punjab), would appear to embody a good deal of the legends, traditions, and history of the Aryans as well as of the mixed Arvan-non-Aryan peoples and was created consciously as the national poem of a new Hindu nation of mixed origin welded into one people under Brāhmana guidance Viewed in this light, the pre-Vedic antiquity of a number of heroic tales and legends and dynastic "histories" as being really pre-Aryan, possibly Dravidian, can be properly understood, as cases of rendering in the Aryans' language of pre-Arvan material.

On the ideological plane, the synthesis of the Aryan and non-Aryan mentalities and attitudes towards life has given rise con-

sciously as well as unconsciously to a common set of ideals which are actively practised, or are subscribed to, by the greater part of Indian humanity, and these ideals are along the following lines: a sense of the unity of all life through its being an expression of an Unseen Reality, which is both immanent and transcendent; a desire for synthesis, to combine apparently disconnected or discordant fragments in life as well as experience in their proper place in an essential unity; a rigid and intransigent adherence to the intellect while seeking to harmonize it in the higher plane with the emotions and with the mystic sense; a recognition of the sorrows of life, leading to a sincere attempt to go to the root causes of these with a view to remove them from the life of the individual, the community, and the whole of humanity, a desire to attain to the Unseen Reality as the solution of all evil and suffering through the ways of knowledge, of mystic realization by discipline, faith, and devotion, and of disinterested service: a sense of the sacredness of all life which is sought to be maintained by passive non-injury (ahimsa), by intellectual pity (karuna), and by practical charity and welldoing (maitri), and an acceptance of all spiritual experiences as true and as inevitable, and a tolerance for all of these so long as they do not interfere with the rights of others. A broad toleration which is the result of a wide understanding, and the doctrine of "live and let live"-these characterized, or formed the bedrock of the civilization of India, and this attitude was the result of this civilization being in its origin a complex harmony of composites, where there has not been any consciously active or successful struggle to maintain the racial, linguistic and cultural superiority of one of the component elements over the others

The speakers of the Austric, Dravidian and Indo-European Aryan tongues, racially Proto Australoids, Mediterraneans, Nordics, Alpines, and Dinaries, made up the Indian people and built up the civilization of India. After this civilization had taken its definite colour and its special orientation, by the middle of the first millennium B C another new racial and culture-language element came into India-the Mongoloid Sino-Tibetan speakers-the Kirātas: but they touched only the fringe of India in the north and the north-east and their influence was but local, and not of much significance According to a Tibetan tradition of very doubtful value, the Tibetans first settled in Tibet during the time of the Buddha But it was over a thousand years after that, in the seventh century A D, that they came in active contact with India-an India which was already far advanced in her composite Aryan-non-Aryan culture. The various Sino-Tibetan tribes were in a very primitive and backward condition and they did not have much to give to the Indians, of Austric-Dravidian-Arvan affinities and origin There is a Mongoloid stratum in the Himālayas and in the tracts immediately to the

south, in Assam, in North and East Bengal; and in the evolution of Arvan languages like Gorkhali or Nepāli, Bengali and Assamese. some Sino-Tibetan (Tibeto-Burman) influence has been suggested The Sino-Tibetan peoples, at least those among them who could benefit by their contact with Indian culture, thoroughly imbibed it and, like the Newars of Nepal valley, became fully Indianized. It is only where they are remote from the Arvan-speaking Indians that they are able to maintain their separate identity a little; but their absorption into an Arvan-speaking Indian body-politic is inevitable, whether in Nepāl or in Bengal or in Assam. But in the process of their becoming completely Indianized, they are sure to make at least some temperamental contribution to the Indian populations of the north and the north-east, if not much in the way of the material or spiritual, and it is for the future to disclose what line this Kirāta, this Indo-Mongoloid or Mongoloid contribution to Indian mentality and culture will take 27

1 The Census of India 1901

Indo-Aryan Races. I, Rajshahi, 1916
 The Census of India 1931, Vol. I, pp. 424 ff

A THE CENSUS OF INSULE ISSUE, VOI. 1, DO See if The Census of India, 1931, Vol. 1.
Part III (1935); An outline of the Racal Ethnology of India, Calcutta, 1937
Racial Elements in the Population, No. 02 of "Oxford Pamphlets on Indian Affairs." Oxford University Press, Bombay, 1944

6 For a detailed discussion on these points, of Ch X

7 Racial Elements in the Population, p 26
8 The Census of India, 1931, Report, Part I, p 443
9 For these, cf Ch VII.

10 Cf Mata-Hart by Renward Brandstetter, Lucerne, 1908 Brandstetter's linguistic papers on Indonesian are available in English translation by C O Blagden (RASB, London)

(RASE, London)

Some of the important papers in this connection have been translated from French into English by Dr. P. C. Bagchi with additional notes and papers in his Pre-Arigin and Pre-Dreadsian in India (Calcutta University, 1929)

12 S. K. Chatterji, "Two New Indo-Aryan Elymologites" in the ZII, Band 9, Leipzir, 1833-34, pp. 31f

13 P. C. Bagchi, Pre-Aryan and Pre-Draudian in India; J. Przyluski, "Hippokouro et Siakamin" (RAS 1959, p. Zi4-9; English translation in JAHRS, Vol. IV. Rit. 1830), S. K. Chatterji, "Non-Aryan Elyments in Indo-Aryan" (JGIS, 1944), P. Mira, "A Vedic Night of the Moon in Polynesia," Calcutta Oriental Journal, Vol. I, July, 1934.

18 P. Mira, "A Vedic Night of the Moon in Polynesia," Calcutta Oriental Journal, Vol. I, July, 1934.

 W. G. Archer, The Blue Grove, the Poetry of the Oraons (London, 1940), p. 19
 A résumé of Hevesy's views has been given by Dr. Biren Bonnerjee in IC, 1937, pp 621-32 16a J Przyluski, "Emprunts anaryens en Indo-aryes," Le Monde Oriental, Vol 28

(1934), pp. 140 ff

16 Moyr, pp. 189 II
16 Nor Disan-Dayu, cf also Ch XIII.
16c. The Vedic speech would seem to have been written down in a sort of Proto-Brahmi as an adaptation of the pre-Aryan Hareppa and Mohenjo-davo script for the Aryan language in the tentic century B.C., when "Vyass," contemporary of the Mohdbertein brittle, could compile the Veda books from the footing mass of oral religious literature current among the Aryans—and Vysias, according to a realition preserved by Al-Birun, rediscovered for the Hindus their alphabet (For different views about the date of the Mahdbhārata battle, cf. Ch. XIV).

17. Comparative Grammar of the Dravidian Languages, third edition (1913), p. 113.

18 Pre-Aryon Tamil Culture, Madras, 1930. 19 Dravidic Studies, No III (University of Madras), pp 59 ff.

- 20 P. T. Srinivasa Aiyangar (Iyengar), Life in Ancient India in the Age of the Mastrae (Madras, 1912), p. 125, Dramdic Studies, No. III, pp. 61-2
 S. K. Chatterji, "Drawdidian Orignas and the Beginnings of Indian Civilization," (MR, Dec. 1924, p. 679).
 22 P.T. S. Alyangar, op cut., p. 126
 23 Drawdide Studies, No. III, p. 62
 24 Cf also Pre-Argun Tamil Chiruc.
 25 Cf. Ch. IX. 25
 25 Gr. Ch. IX. 3, p. 400
 27 Rev Its Aurisa or Indo-Mongolouds, see Kasten Ronnow in Le Monde Oriental, Vol. XXX (1936), pp. 90-169

171

CHAPTER IX

THE INDUS VALLEY CIVILIZATION

Until as recently as 1922, early Indian history had little actual remains to offer besides the meagre palaeolithic and neolithic finds, described above (Ch. VII), and the Piprahwa relic was the oldest object of which the date (c. fifth century B C) could be approximately determined. The antiquity of Indian history and culture as gleaned from Vedic literature is also not supposed to go beyond the second millennium before Christ. But the achae-logical discoveries at Harappā, Mohenjo-daro and other localities (see map No. 2) in the Indiau valley have pushed back this limit, at a single stretch, to 3000 B C, if not to a still remoter period, and India can now lay claim to the honour of being a pioneer of evulvization along with Sumer, Akkad, Babylon Exput, and Assyria

The fascinating story of the excavations at various places in the Indus valley has been told above (Ch. III) and we shall now try to reconstruct a picture of the culture and civilization that flourished in this region from the remains found principally at Herappā and Mohenjo-dan.

1 THE TOWN

A visitor to the runs at Mohenjo-dato (the city of the dead) is struck by the remarkable skill in town-planning and sanitation displayed by the ancients, and, as an English writer has observed, "feels himself surrounded by runs of some present-day working town in Lancashire". The city was entered from the north and south by the First Street which is amply wide for both wheeled traffic and pedestrians. East Street, which is the main thoroughfare through the runs is wider than First Street. The junction of these two is nicknamed "Oxford Circus" by archaeologists.

The city was the creation of careful forethought and planning, as is indicated by the striking regularity of the divisions, the successfully aligned streets, the orientation of all punicipal streets to the points of the compass, the correspondence of the houses and public buildings with the orientation of thoroughfares, etc. Streets varied from 9 feet to 34 feet in width and ran straight sometimes as far as half a mile. They intersected at right angles dividing the city into square or rectangular blocks. Inside this square or ohlong, the area is intersected by a number of narrow lanes crowded with houses. Each lane has a public well, and most of the houses have each a private well and a both. Nowhere was a building allowed to encroach on a public highway as in Sumer. The angles

THE INDUS VALLEY CIVILIZATION

of the smaller by-ways appear to have been rubbed by pack-animals, and the corners of some buildings were rounded off in order that loads might not be dislodged. The city had an elaborate drainage system consisting of horizontal and vertical drains, street drains, soakpits, etc., which is described later on. The industrial and comercial quarters as well as the lowly abodes of artisans and shop-keepers and the palatial mansions of the rich can easily be distinguished among the ruins. The general impression is that of "a democratic bourgeois economy" as in Crete.

The architecture of Mohenjo-daro, m general, is plain and utilitarian, rather solid than beautiful. There are no sumptuous temples as in Sumer nor monumental tombs as on the Nile. In contrast to Sumer, there is an absence of round columns, recessed doorways, and semi-circular pilasters. The true arch was unknown and the corbelled arch and square or rectangular columns were used instead. The aim in the Indus Valley was to make life comfortable and luxurious rather than refined or artistic

Harappā is larger in extent than Mohenjo-daro, and had a longer span of life, but presents nearly the same features. Wells at Harappā are rare as compared to Mohenjo-daro. The most remarkable and largest building at Harappā is the Great Granary, measuring 169 feet by 135 feet, which comprises two similar blocks with an asle, 23 feet wide, between them Each block has six halls, alternating regularly with five corridors, and each hall is further partitioned into four narrow divisions. Another discovery at Harappā is the workmen's quarters, which comprise fourteen small houses built in two blocks separated by a long narrow lane. Each house is open on all sides, rectangular, and consists of a courtyard and two rooms.

At the hill sites in the narrow corridor between the Indus and the Kirthar range, excavated by Mr. Majumdar, bricks were never used as at Mohenjo-daro, Harappā, and other sites Hill-side houses were made of stone at the base up to a height of two to three feet Mud, reed, and wood were used in building superstructures No fortifications were discovered at Mohenjo-daro and Harappā; on the outskirts of Ali Murad and Kohtras were found fortified palaces made of stone, which was but rarely used in the plains, not being easily available there. At sites around Lake Manchar, people lived in pile dwellings.

In building walls, pavements, bath-rooms, drains, wells. etc. the brick, possibly made from ordinary alluvial soil, was lavishly used Sun-dried brick was used only for foundations, packing of terraces, etc. Bricks are ordinarily rectangular in shape, well made, and excellently preserved. Even at the lowest levels we find well-made bricks which would be a credit even to a modern brick-maker Wedge-shaped bricks were invariably used in constructing wells,

and were made in a mould. Sawn bricks were used in bath-rooms to ensure evenness of floor. Curved bricks, which were used for the building of bins lining of wells, have hitherto been found only at Chanhu-daro. None of the bricks have grooves or depressions. Brick kilns have been found at Mohenjo-daro. The colour of the bricks ranges from straw to bright red.

Seven different layers have been recognized in the excavations at Mohenjo-daro. The antiquities in all these levels are homogeneous, the only point of difference being the deterioration of masonry in the later occupation of the cities. Mud mortar was generally used as a cementing material. In drains, where more strength or binding force was required, lime and gypsum mortar were used The joints in some of the brick-work are so fine that even a thin knife cannot be inserted in them. Occasionally, bitumen was used for water proofing.

Foundations were carried to considerable depths and crude brick was used for infilling. Buildings were erected on artificial mud platforms as a precaution against floods to which ancient Sind was subject.

In most walls bricks were laid in the English Bond method, in alternate headers and stretchers, care being taken to break the joints. A filling of clay or rubble was used between the faces in very thick walls in order to economize bricks. In most cases the vertical alignment of buildings is marvellous, indicating that a plumb bob or a similar instrument was used. This was done by placing each course a little back from the course below or by employing specially moulded bevelled edged bricks. Walls surmbunting pavement were wainscotted with bricks laid on edge standing 3 feet above the floor level

The buildings thus far unearthed in the Indus Valley fall into three main classes (i) dwelling houses. (ii) larger buildings, and (iii) public baths

There is much variation in the size of dwelling houses. The smallest have no more than two rooms, while the largest are so vast as to rank almost as palaces. Outside walls of the dwelling houses were severely plain

Ordinarily there was an entrance from the street side The houses were quite commodious, divided into well sized rooms, containing wells and bath-rooms, and provided with covered drains connected with street drains The open court was the basic feature of house planning in the Indus Valley, as in Babylon. The courtyard which was usually paved with bricks laid flat was surrounded by chambers, and doors and windows opened into it. The kitchen was placed in a sheltered corner of the courtyard, and the ground floor contained store rooms, well chambers, bath, etc. Every house had a separate bath-room, placed at the street side, paved with care-

THE INDUS VALLEY CIVILIZATION

fully laid burnt bricks, which sloped to a corner containing the drain carrying off waste water. Vertical drain pipes suggest that baths were constructed on the upper storeys also. Doors were possibly made of wood and were placed at the ends of the walls. not in the middle. Ordinary houses very rarely had windows in their outer walls. Possibly perforated lattices were used as windows or ventilators at the top of the wall Stairways, made of solid masonry, are found in nearly every house. They were built straight and steep, with treads unusually narrow and high. In some cases, the stairways led to the upper storeys which contained the bath and the living and sleeping apartments. Roofs were flat and made of wood. It appears that no latrines were ordinarily provided, or they were situated at the top Doorless chambers in some houses have variously been taken to be cellars, or cess pits for latrines, or sleeping apartments, or solid foundations as a precaution against floods or treasure rooms 2 Practically every house had its own well, and public wells were placed between two houses, with a pavement of burnt brick which sloped down to a drain at one corner. Two wells have a square coping at the top, and two are elliptical in shape. Some form of windlasses appears to have been used for drawing water

The elaborate drainage system is a unique feature of the Indus Valley Civilization, the like of which has not yet been found in any other city of the same antiquity Below principal streets and many lanes ran a main drain, 1 to 2 feet deep, covered with brick or stone, and provided with sumps and inspection traps at regular intervals Individual house drains, each one with its own sump pit, opened into the street drains, which in their turn opened into great culverts emptying into the river. All soak pits and drains were ocasionally cleared by workmen, and drains were provided with manholes at intervals for cleaning. This elaborate drainage system, like the town-planning constitutes a notable point of difference with Sumer, where the inhabitants had, in most cases, vertical pottery drainage shafts beneeath their courtvards, but these had no outlet.

As regards larger buildings, some, which were earlier indicated as temples, were later taken to be khans. With the possible exception of the building housing the Great Bath, no building has yet been cleared which can definitely be called religious. The great structure near the Stāpa, with extra-thick outer walls, has been named the Collegiate Building, and probably housed some high official, the high priest, or a college of priests. A pillared hall, 80 feet square, divided into long corridors interspersed with low benches having even seats, has the chief seat at right angles to the corridors. It may probably have served for a bublic assembly.

The Great Bath, which has been taken to be a part of a vast hydropathic establishment is "a swimming bath on a scale which

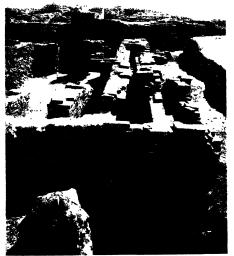
would do credit to a modern seaside hotel."3 The overall dimensions of the building housing it are 180 feet by 108 feet. The actual bathing pool, measuring 39 feet by 23 feet with a depth of 8 feet, is situated in the middle of a quadrangle having verandahs on all sides. At either end, there is a raised platform and a flight of steps, with another platform at the base of each flight of steps. The floor is made of bricks laid on edge, and the walls have been made water-tight by employing specially trimmed brick in gypsum mortar with an inch of damp proof course of bitumen. There is a vaulted culvert, 6 feet 6 inches high, at the south-western corner, which could fill and empty the tank On three sides at the back of the verandahs are various rooms and galleries. There is a spacious verandah with small rooms at the southern end There are six entrances to the building containing the bath. It cannot be definitely stated whether the Great Bath was used entirely for secular purposes or for religious ceremonies.

Near the south-west corner of the Great Bath is a hammam or not air bath. It has a number of rectangular platforms of brick about 5 feet high, having a series of vertical chases sunk in their sides. There is another similar building at Mohenjo-daro which shows that the Indus people understood the principle of the hypocaus and had Turkish baths. Another bath-room establishment consisted of two rows of bath-rooms separated by a narrow passage, each bath-room having a stairway, a narrow doorway and carefully paved floor. According to Dr. Mackay, these ablution places were meant for the priests, while the Great Bath was for the general public

The careful town-planning, adequate water supply, and efficient drainage system presuppose an advanced state of civic authority Lamp-posts at intervals indicate the existence of street lighting. There was also a watch and ward system for different quarters, and large caravanserias and public store-houses were provided. That the santation was well looked after is seen from the rubbish heep consisting of broken pottery, ashes and humus found in deep trenches outside the city. Trees and plants were allowed to grow in the enclosures. The later levels of the city, however, show the decline of civic authority, as buildings were erected in a haphazard manner, there were encroachments upon lanes, and potters were quartered in the city.

SOCIAL AND ECONOMIC LIFE

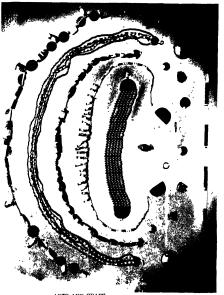
All the skeletons unearthed at Mohenjo-daro belong to the chalcolithic period and may be taken as representative of an urban population. Craniological tests reveal the presence of four racial types at Mohenjo-daro, viz., (i) Proto-Australoid: (ii) Mediterranean; (iii) Mongoloid and (iv) Alpinoid (ante, Ch. VIII). The cosmopoli-



Courtesy Archaeological Survey of India
CORBELLED DRAIN, MOHENJO-DARO (See p 175)



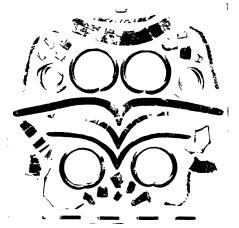
GREAT BAIH MOHENJO-DARO (See to 175)



SQUIRREL IN FAIENCE

2 GLAZED FIGURE OF MONKEY

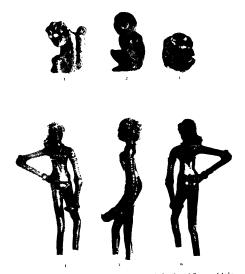
PLATE IV



Courtesy Archaeological Survey of India PERSONAL ORNAMENTS MOHENJO-DAFO (See f. 178)



PLATE V



Courtesy Archaeological Survey of India ARTS AND CRAFTS, MOHENJO-DARO (See p. 183)

1 SQUIRREL IN FAIENCE 3 BEAD CARVED WITH THREE MONKEYS.

2 GLAZED FIGURE OF MONKEY 4-6 BRONZE DANCING GIRL





Courtesy Archaeological Surrey of India

PLATE VII



Courtesy Archaeological Survey of India

SEALS, MOHENJO-DARO (See pp. 186, 1901.)
1-3 UNICORN WITH A STANDARD 4 SIVA PASUBATI 5-6 SEALS DEPICTING SIVA 7 HORNED ARCHER 8 TRISI LA-HORNED DEITY

PLATE VIII



1 FRACTIONAL BURIAL, MOHENJO-DARO (Sec p. 193)



Courtesy Archaeological Survey of India
2 MODEL ANIMAL (HORSE) MOHENJO-DARO (See p. 198)

tan character of the population in a place like Mohenjo-daro with easy land and water communications is quite natural. It was evidently the meeting ground of the people from different parts of Asia. Sculptural representations also speak of the mingling of diverse races.

Unity a country capable of producing food on a large scale, and the presence of a river sufficiently large to facilitate transport, irrigation, and trade, can give rise to cities of this size. The large number or saddie querns found in the excavations indicates cultivation on an extensive scale. Though little is yet known about the actual memors of agriculture acopied by the people, the examination of the specimens of wheat and pariety found in the runs shows that they were not of the wild species. The same variety of wheat is cultivated in the Punjab today. The unit of weight indicates that are was also grown. The date paim was also an article or dict as is shown by the stones found.

Besides wheat, barley, and rice, milk, too, must have been an important item of tood, and doubtiess vegetables and other fruits besides the date were included in the dietary. Harappā cultivated peas and sesamums. In addition, animal tood was eaten, including beel, mution, pork, poultry, the flesh of the gharad, turtle and toriose, tresh-river fish and dried fish from the sea, and also shell fish. The half-burnt shells and bones of these animals found in houses, lanes, and streets definitely indicate that they were articles of diet.

Animals were both domesticated and wild. Actual skeletal remains of the Indian humped bull, the buffalo, the sheep, the elephant, the pig, and the camel have been recovered. The Indian humped ox, or "Brāhmani bull," is frequently represented on the seals. It seems to have been a sacred animal, as it is today Bones of the horse have also been found, but not far below the surface. There is some difference of opinion on the subject, but on the grounds to be subsequently stated, it seems reasonable to suppose that horse was known to the Indius people. The cow was known, and so probably was the lion Clay models of toys indicate that the Indian bison, the rhinoceros, the tiger, the monkey, the dog, the bear, and among smaller animals may be included the mongoose, the squirrel, the parrot, the peacock, and the domestic fowl. Harappā knew of the domestic cat.

As regards dress, no actual specimens of ancient clothing have been discovered and we have to depend on the indications supplied by figurines and statuary One alabaster statue shows that two garments were worn. A shawl-like cloth, worn over the left shoulder and under the right arm so as to leave the right arm free, formed the upper garment. The lower garment resembled modern dhoti and was worn quite close to the body. Female attire did not differ

from that of the male. Garments were of cotton and perhaps of wool, and possibly they were sewn, as would appear from the needles found at the site.

With regard to the various fashions of han-dressing, we know more about male styles because the head-dresses worn by the female figurines prevent the hair from being seen. It is likely that women had a plait tied with a bow at the end, a favourite way of dressing the hair in modern India. Men wore long hair; this was either parted in the middle and the short locks at the back kept tidy by a woven fillel; or was colled in a ring on the top of the head, similar side rings concealing the ears, or were carried in a mass to the back, or a plaited lock was carried forward from behind in a large loop which turned in again and was secured by a fillet. Short hair was secured by means of a fillet or was colled in a knot with hair pins. These fillets were made mostly of gold, silver or copper. Men grew short beards or close-cropped them along with the upper lip, which was sometimes clean shaven.

With the traditional oriental fondness for ornaments, men and women, both rich and poor, decorated themselves with them and all known semi-precious stones and metals were utilized for manujacturing various ornaments. Women wore a fan-shaped headdress. Small cones of gold, silver, copper, and faience, as also of shell, were worn on the sides of the head. The forehead was decorated with a fillet or a headband. Ear-rings were made of coils of gold, silver, copper, or faience. It is doubtful whether any noseornaments were used. There was a variety of necklaces having pendants in the middle with a number of rows of beads of various shapes and materials artistically arranged using spacers and terminais. Finger-rings were plentiful, and bangles and bracelets were commonly used. Materials for bangles and bracelets were gold, silver, copper, bronze, faience, shell, and pottery. Gold and silver bangles were penannular in shape with their hollows filled with a fibrous or a lac core. A bracelet with six strings of globular beads is an excellent specimen of workmanship. Girdles, of which two fine specimens have been found, were worn round the waist. Anklets of the type still used by hill women round the Simla Hills were worn. Various stones such as carnelian, steatite, agate, chalcedony. iasper, etc., were pressed into service in the manufacture of beads which evince fine workmanship and technical skill on the part of the lapidary. Of the various ornaments mentioned above, men wore fillets, necklaces, finger-rings and armlets. A vellow steatite pectoral was probably the insignia of office of a priest.

We can also form some idea about the toilet and cosmetics of the people. The "vanity case" found at Harappā, with its combination of piercer, ear-scoop, and tweezers, invites comparison with smilar finds from Ur. Kish and Khafaje, both types showing the

same peculiar construction of the looped head. Toilet jars were made of ivory, metal, pottery, and stone. Small faience vessels having four compartments were used for keeping expensive perfumes or cosmetics. It appears that the ladies at Mohenjo-daro knew of the use of collyrium, face-paint, and other cosmetics. Small cockle shells containing a red ochre rouge, lumps of green earth, white face-paint and black beauty-substance show that the belles in ancient Sind attended to beauty and toilet culture. It is interesting to note that Chanhu-daro finds indicate the use of lip-sticks.6 Carbonate of lead, a face-paint, may also have been employed as an eye-ointment or hair-wash. Round metal rods in copper and bronze. with both ends rounded and polished, were probably used for applying cosmetics There were small toilet tables specially designed for women. Other articles on the dressing-table included mirrors. made of bronze, oval in shape, and combs of different shapes made of ivory. Some combs were probably worn in the hair. Razors of various types, made of bronze, served for the toilet of the male,

Various household articles have been found at Mohenjo-daro. These were made of pottery, stone, shell, faience, ivory, and metal. Coppen and bronze appear to have replaced stone as the material for household implements. Pottery supplied for the kitchen numerous articles including flesh-rubbers, cake-moulds, dippers, beakers, bowls, goblets, dishes, basins, pans, saucers, ladles, heaters, jar stands, storage jars, etc. Goblets with pointed bases were the customary drinking vessels, which were possibly to be used only once. Querns, paleties, and jar stands figure among articles of stone. Jar covers and ladles were also made of shell. There were needles, awis, axes, saws, sickles, kinives, fish hooks, chisels, etc., made of bronze or copper, the first two also in ivory. Blocks of lead were probably used as net-sinkers.

Chairs, bedsteads, and stools were used to decorate the drawing room. Possibly there were wooden beds like charpais, and stools were made of wicker work and mats of reeds. There were lamps of copper, shell, and pottery. A pottery candlestick found in the ruins indicates that candles, probably made of wax or tallow with wicks of cotton, played their part in illuminating the houses at Mohenjo-daro.

Marbles, balls, and dice were used for games Marbles were used as playthings both in Sumer and Egypt. That dicing was a common pastime just as it was in Vedic times is indicated by the large number of dice unearthed Both cubical and tabular specimens are found, the latter being the commoner. Unlike the oblong pieces in common use in India at present, they are usually cubic in shape like the European dice; but the arrangement of numbers differs from the European system (where the sum of points on any two opposite sides amounts to 7), 1 being opposite to 2, 3 to 4, and

5 to 6. The tabular dice, invariably made of ivory, have three sides marked with numbers 1, 2, 3 and the remaining side is decorated with longitudinal lines. Of the seven pieces found at Harappä, four bear markings like those of Mohenjo-daro, on two are marked 1 opposite to 2, 3 to 4, and 5 to 6; and one has markings like the modern dice (i.e., 1 opposite to 6, 2 to 5, and 3 to 4). Thus there were three different ways of marking dice in the Indus Valley. It is not certain whether the throwing of dice constituted a game in itself Possibly dice were used in conjunction with board games, as two momplete specimens of game boards of brick have been found. Some flat models of fish in ivory appear to have been used in some game.

Some representations on amulet seals showing men shooting a wind goat and a large antelope with bows, and arrows, and the remains of large antiers of deer and stags indicate that hunting was indulged in. Bull fighting was probably another pastime. There are indications to show that birds were kept as pets, and also for fighting. A certain amount of trapping was also carried on, and fishing was a regular occupation. Clay modelling appears to have been a favourite pastime with children, as is indicated by the large number of crude specimens of childish workmanship.

Specimens of toys are various, interesting, and ingenious Little clay carts appear to have been the favourite toy with children as a would appear from the large number found. Pottery rams, with the fleece indicated by lines of red paint and mounted on two wheels with a hole through the neck for a draw-string were common playthings. The toy carts are particularly interesting as being among the earliest representatives of wheeled vehicles known to us. Usually toys were clay models of men, women, and animals, whistles, rattles, etc. There were also toy birds provided with stock legs, small animals climbing up a pole, and figures with movable arms. The bull with a nodding head worked by a stiff fibre, and a monkey-like animal with movable arms figure among the more ingenious toys. Complex toys like figures moving up and down a string whose progress could be accelerated by manipulating a cord were also manufactured.

Bullock-carts were the chief means of conveyance In addition to models of carts found at Mohenjo-daro similar to the farm carts in common use at present in Sind and the Punjab, a copper specimen has been found at Harappā, which looks like an ekkā of the present day, with a canopy for protection from the sun and rain It thus appears that the ancients also used the same type of the bullock cart as is found in modern Sind, which was probably drawn by two animals yoked to a pole. Bullock carts with a gabled roof over a wooden frame were also in use.

Weights have been found in large numbers, and range from

large specimens which had to be lifted with a rope to very small ones used by jewellers. Cubical weights seem to be by far the most common. Some small weights of dark grey slate resemble the barrel-shaped weights of Elam and Mespotamia, and are more accurate and consistent than those of Susa and Iraq. The sequence of ratios is binary in the case of larger ones. There is no evidence of a sexagesimal system. The unit weight has the calculated value of .8750 gms, the largest weight being 10970 gms. The most frequently discovered weight is one of 13.64 gms, which stands in the ratio of 16 to the standard unit of weight indicating the dominance of the number 16 in Indian culture. It appears that a strict control was exercised over the maintenance of the proper standard of weight. The poor used ordinary pebbles as weights

The few specimens of scales used with the weights appear to be of a very ordinary pattern, consisting of a bronze bar with suspended copper pans. Heavy weights must have required much larger beams, which were most probably made of wood. There is no evidence that the steelyard was known.

It is more difficult to form an idea of the measurement of length. A slip of shell, 6.62 inches long, which now preserves nine definite divisions each averaging 0,264 inches, has been taken by Dr. Mackay to be part of a linear measure. As groups of five appear to bear special marks, it seems that the decimal system was known, the measure indicating a decimal scale of 1.32 inches rising probably to a foot of 13.2 inches. Egypt was familiar with the decimal system of linear measure since the Fourth Dynasty, and a purely decimal system is found on Proto-Elamite tablets. Early Sumer used both the decimal and the sexagesimal systems. Probably the decimal system originated independently in the Indus Valley. Harappa ruins have yielded a fragmentary measure, a bronze rod, 1.5 inches long, broken at both ends, bearing four complete divisions accurately marked. It seems to have been based on the standard cubit of 20.62 inches which was widely used in the ancient world. Thus, the Mohenio-daro and Harappa measures indicate that both the foot and cubit systems were current simultaneously in the Indus Valley.

Of the medicines used by the people we know but little. Pieces of a coal-black substance forming a dark-brown solution of water have been identified with Silājit, which is known to be a specific for dyspepsia, diabetes, diseases of the liver, rheumatism, etc. Several cuttle fish bones have been found stored in pottery. Cuttle bone is internally used as an appetiser, and externally in diseases of ear, eye, throat, and skin. The horns of the deer and antelope (and possibly also of the rhinoceros) were valued for their medicinal qualities. Coral and leaves of the nim tree (azadirachta indica) were possibly used as medicines. All these specifics are still prescribed in ägur-

vedic medicine, and thus the origin of the indigenous medicinal system of India may be traced to the Indus Valley Civilization.

Abundant specimens of weapons, tools, and implements have been discovered. Weapons of war or the chase were axes, spears. daggers, bows, arrows, maces, slings, perhaps catabults, and swords, made generally of copper or bronze. Blade axes resemble the early specimens found at Susa. Spear heads are thin and broad, without the strengthening mid rib, and with a tang instead of a socket. The daggers and knives are generally long and leaf-shaped, some with a single edge and others with two. Arrow heads are thin, flat pieces of copper with long narrow barbs and no tang. Maces were made of alabaster, sandstone, limestone, or hard green-coloured stone, and the pear-shaped mace, resembling the specimens from Elam, Mesopotamia and Egypt, was most common Swords are considerably thickened in the middle, but have blunt points suggesting that they were not used for thrusting. A kind of scale armour prepared from thin domed pieces of copper perforated with two minute holes was worn as for protection, and the shield was probably used for defensive purposes.

Lance heads, chisels, celts, axes, adzes, and saws figure amony, the tools and implements. Axes are either long and narrow or short and broad, the latter being probably used for cutting wood. A single specimen of a socketed bronze adze-axe is known, which can be compared to some finds in the Caucasus region. The cutting edge of the saw is semi-circular in shape and the toothed edge is wavy. Toothed saws were unknown among other peoples of anti-quity.

The people of Mohento-daro maintained close contact with the outside world. For the import of various metals, precious stones, and other articles the Indus Valley had connections with Southern and Eastern India, Kashmir, Mysore, and the Nilgiri Hills. as also with the countries immediately to the West and Central Asia (see below, p. 188). Evidence as to relations with Sumer is overwhelming, and trade contacts were maintained with Egypt and Crete The representation on a seal of a mastless ship, with a central cabin and a steersman seated at the rudder, indicates that the people of the Indus Valley were acquainted with maritime vessels. The boat has a sharply up-turned prow and stern similar to the archaic representations on Early Minoan seals, cylinders of Sumer, and the Pre-Dynastic pottery of Egypt Dr Mackay thinks that the Indus Valley was in touch with Sumer and Elam by the sea route also. Mohenio-daro thus appears to have been a great inland port carrying on trade with Ur and Kish, probably also with Egypt.

The remains unearthed at Mohenjo-daro demonstrate the existence of different sections of people who may be grouped into four main classes, the learned class, warriors, traders and artisans, and

finally manual labourers, corresponding roughly to the four Varque of the Vedic period. The learned class probably comprised priests and physicians, astrologers, and sorcerers. According to archaeologists there is practically no vestige of the fighting classes, but the existence of "palaces" with ancient foundations, of substantial swords showing that some of the people were well armed, of watchmen's quarters at Mohenjo-daro, and of ancient fort walls at other sites in Sind, points to a class similar to the Kshatriyas, whose duty was to protect the people. A commercial class and various artisans such as the mason, engraver, shell-worker, weaver, gold-smith, etc., formed the third class Domestic servants and manual labourers like leather-workers basket-makers, peasants, fishermen, etc., belonged to the last class.

3. ARTS, CRAFTS, AND INDUSTRIES

There is very little sign of art for art's sake in the Indus Valley. There is no trace of ornameniation in houses and public buildings. fools, weapons, vessels, etc., are quite plain and practical but lack subtle grace Even the painted pottery has commonplace designs Specimens of art are to be sought only in figurines, seals, amulets, and other small objects. All figurines are well baked, and some of them are painted in red. The majority of human figures are temale and they are nude except for a narrow girdle round the loins. Animal figures are found in large numbers in pottery, the squirrel and monkeys are made in faience, and a turtle in shell. The shorthorned bull is realistically portrayed as on the seals. The mastiff cut from steatite is quite life-like and resembles the English mastiff of today. The small carvings, presumably used as amulets, are most charming, notably little squirrels in faience (Pl. V. 1) not a couple of inches high, sitting up with tails erect and munching something from beneath their fore-paws, little monkeys (Pl. V. 2) with a worried expression, almost identical to what is so noticeable on the faces of their descendants today; and perhaps most delightful of all. a bead carved with three monkeys (Pl V. 3) sitting round in a circle, clasping one another's waists with their arms. The exquisite bronze figure of an aboriginal dancing girl (Pl. V. 4-6) with her hand on the hip, in an almost impudent posture, is a noteworthy object. Her hands and legs are disproportionately long and she wears bracelets right up to the shoulder. The legs are put slightly forward with the feet beating time to the music. "Though more impressionistic in style than the stone sculptures, this figure, which is cast in one piece, astonishes one by the ease and naturalness of its posture."8

Of the seal engravings the best are those of such animals as the humped bull, the buffalo, and the bison, which the artist had an opportunity of studying at first hand. The humped bull is frankly

realistic and spirited, and in its portrayal the artist has tempered realism with breadth of treatment and restraint. The buffalo is very effectively shown with a slightly raised head, displaying its great horns in the act of bellowing. The bison with powerful arched shoulders and relatively small hind quarters is quite lifelike. The blue faience tablet, depicting a deity seated cross-legged on a throne with a kneeling devotee on either side and a snake behind, "serves well to illustrate how instructive and illuminating a background this new-found prehistoric art of India is likely to supply to the later art of historic India." The best of the engraved seals are master-pieces of the engraver's art, as vivid in their drawing as they are skilful in execution, which could only have been turned out by people possessed of marked artistic ability and great technical skill.

Statuary is rare, only a few specimens being found. Statues were cut from comparatively soft stones, grey and yellow limestone. alabaster, and steatite. A steatite male head looks like an attempt at portraiture (Pl. VI. 3). The figure is draped in a shawl, decorated with trefoil patterns, which is worn over the left shoulder and under the right arm The eyes are long, and half closed in a your attitude. The nose is well formed and of medium size, the mouth is of average size with close-cut moustache and a short beard and whiskers; the ears resemble double shells with a hole in the middle The hair is parted in the middle, and a plain woven fillet is passed round the head. An armlet is worn on the right hand and holes round the neck suggest a necklace The noticeable features in all statues are the prominent cheek-bones, the thick, short, sturdy neck, and narrow oblique eyes, in contrast to the Sumerian statues, which have round and full eyes and full, fleshy lips. The heads are brachycephalic, dolichocephalic and mesaticranial

Two statuettes from Harappa have revolutionized the current ideas about early Indian art (Pl VI 1, 2) In both, there are socket holes in the neck and shoulders for the attachment of head and arms made in separate pieces in the red-stone torso, the frontal nose is adopted, the shoulders are well backed, and the abdomen slightly prominent. In the opinion of eminent art critics, for pure simplicity and feeling nothing to compare with this masterpiece was produced until the great age of Hellas. The other statuette represents a dancer standing on the right leg with the left leg raised in front the body above the waist and both arms bent round to the left The pose is full of movement The neck is abnormally thick, possibly it may represent Siva Nataraja, or the head may have been that of an animal. The anatomical faithfulness in these statuettes is striking. Specimens of art in lapidary work are found in the remarkably well-made stone beads, specially those of clear and clouded agate, red translucent carnelian, etc. An in-

stance of the considerable skill exhibited in the manufacture of stone beads is one that was made of five segments of chalcedony and deep red carnelian, which were cemented together to imitate a bead cut out of a piece of regularly veined stone.

From the discovery of many spindles and spindle whorls in the houses in the Indus Valley it is evident that spinning of cotton and wool was very common. That both the rich and poor practised spinning is indicated by the whorls being made of the expensive faience as also of the cheap pottery and shell. No textiles of any description have been preserved in the Indus Valley owing to the nature of the soil A close and exhaustive examination, in the Technological Laboratory, of the pieces of cotton which were found attached to a silver vase, shows the specimen to be a variety of the coarser Indian cotton, cultivated in upper India today, and not of the wild species. Some more specimens of woven material adhering to various copper objects have also been found to be mostly cotton, but some were bast fibres. There is no indication from the ruins as to the existence of flax, which is largely grown in India at present and was known in ancient Elam and Egypt. The purple dye on a piece of cotton has been taken to have been produced from the madder plant Dyers' vats found on the site indicate that dyeing was practised

The Indus Valley pottery consists chiefly of very fine wheelmade wares, plain pottery being more common than the painted ware or ware with designs. In marked contrast to the delicate thinness of much of the Iranian and Mesopotamian wares, the Indus Valley pottery is heavy and utilitatian

The clay used was the alluvium from the Indus, tempered with sand generally containing fine particles of mice or line Most of the specimens are wheel-turned, very few being hand-made. Pottery, brick, and terracotta were fired in kilns which were circular in shape with arrangements for heating underneath a floor provided with flues

The plain ware is usually of red clay, with or without a fine red or grey "slip". It includes knobbed ware which is a curious type ornamented with rows of knobs. Imported Indian vases of this type have been found at Tell Asmar. The black-painted ware has a fine coating of red slip on which geometric and animal designs are executed in glossy black paint. Polychrome pottery is rare and mainly comprised of small vases decorated with geometric patterns in red, black, and green, rarely white and yellow.

Incised ware also is rare and the incised decoration was conined to the bases of the pans, always inside, and to the dishes of offering stands Egg-shell pottery, locally known as Kagzi, is of exquisitely delicate workmanship and is absent in Susa and Babvlon Perforated nottery has a large hole at the bottom and small

holes all over the wall, and was probably used for straining liquor.

Pottery for household purposes is found in as many shapes and sizes as could be conceived for daily practical use. Straight and angular shapes are the exception, and graceful curves the rule, with the Indus Valley pottery. Miniature vessels, mostly less than half an inch in height, are particularly so marvellously executed as to evoke the admiration of visitors

Shanhu-daro appears to have been a manufacturing centre of toys, judging from the large number unearthed there Pottery rattles, gaily decorated, and model pottery carts in various shapes with humped oxen are exceedingly common Pottery rattles are so substantially made that hardly a broken specimen is found There is a wide variety in the types of toy cart.

Seals discovered in the various strata constitute one of the most interesting features of the finds Hitherto over 2 000 seals have been recovered from the various sites Steatitc, faience, ivory, and pottery are the materials used for manufacturing seals

Stamped seals were invariably made of steatite, which came from Aravalli. Steatite was cut into shape with a saw, after which the boss was cut. The boss was then rounded off after the groove by a knife and finished off with an abiasive. The designs appear to have been cut by a burin. The body was first carved before outlining other parts. Inscriptions were added later. Almost all seals were coated with a smooth glossy glaze. Steatite was hardened by heating.

Seals are of various sizes and shapes, the most popular shape being square or oblong, with a pierced hump at the back for suspension, and a flat face decorated with exquisite designs, generally of animals, and with inscriptions in a pietographic script. The inscriptions on the seals, however, do not seem to have any connection with the figures on them, as the same animal figure is found in company with completely different inscriptions. The Svastika design, which is found in Crete, Cappadocia, Troy, Susa, Musyān, etc, but not in Babylonia or Egypt, appears on particular types of seals and indicates their religious use or significance. Though cylinder seals were universally used in Sumer, only three specimens have so far seen found in the Indus Valley, having purely Indian devices.

A number of small steatite tablets recovered from the lowest levels at Harappā, having almost identical legends, are considered as receipts by Dr. Hunter.^a

There are square or rectangular copper tablets, with an animal or human figure on one side and an inscription on the other, or an inscription on both sides The figures and signs are carefully cut with a burin. These copper tablets appear to have been amultes. "Oullke inscriptions on seals which vary in each case, inscriptions on

copper tablets seem to be associated with the animals portrayed on them.

It has generally been assumed that the designs on the Indus Valley seals like those on the cylinder seals of Babylonia, were of a religious character and showed that the people were animal-worshippers. The commonest animal appears to be the so-called unicorn or antelope, resembling a bull, but without a hump, and a single protruding horn shown in profile. In front of the unicorn is placed a curious object, the lower portion of which is a bowl-like receptacle, with an upper part resembling a cage. Probably both the animal and the object have a ceremonial significance connected with the principal deity of Mohenjo-daro. The other animals are the short-horned bull, the Brahmani bull, the elephant, the tiger, the rhinoceros, the gharial and the antelope A flat-bottomed low manger or trough appears on some seals, and it is seen only before wild animals The short-horned buil, the buffalo, and the rhinoceros are very carefully and realistically portraved. The tiger with an open mouth and protruding tongue sometimes gazes at a tree on whose branches a man is perched. Alongside there appear mythological creatures and composite animals, such as human figures with bull's ears, horns, hoof, and tail, or a horned tiger; or a uruslike animal with additional heads of antelone and short-horned bull. or a most fantastic abortion, a curious human-faced animal partaking of the characteristics of a goat, a bull, a tiger, and an elephant One circular seal shows six animal heads radiating from a boss

The uses to which scals were put at Mohenio-daro are uncertain and have been the subject-matter of various conjectures large variations in the inscriptions speak against their use as money Reversed writing on 99 per cent of these objects becomes inexplicable if they are taken as amulets, and the projecting boss at the back disproves their use for this purpos e Their use in other countries indicates that they were stamped on some plastic material like clay in order to authenticate property or seal the mouths of jars or doors. Owing to their fragile nature, actual clay impressions have been found of only a few specimens. Terra-cotta sealings were probably used for some specific purpose. Their large number and the fact that they have been found in the houses of the rich and poor alike indicate that the inhabitants attached great importance to them, and probably every citizen carried one on his person The attempts in some seals to replace the legend after cutting it indicate that after the death of the original owner of the seal it was taken by another by making appropriate changes in the inscription.11

Among semi-precious stones used for ornament, amazon and anothyst came from the south, and lapis lazuli, turquoise, and addette from the west Riputāna and Kāthiāwār supplied plasma agate, jasper, and blood-stone All these were used for manufactur-

ing beads, regard being paid to their colour-scheme, size, and mark ings. Great technical skill is displayed in the manufacture of beads. The holes in the carnelian beads are well polished and testify to the great skill in boring such hard stones. Some unfigished beads of agate show that they were shaped and smoothed before being bored, for the translucency of the polished stone helped the lapidary in drilling straight. The accuracy of chert weights shows that the people were proficient in the working of flint, agate, gneiss, and other hard stones.

The gold used in the Indus Valley appears to have come from the gold mines at Kolar and in the Anantapur district Different kinds of beads of gold were variously made by soldering cup-like pieces together or by casting or by beating out and soldering together Bangles were made of thin sheets of gold with the metal slightly overlapping on the inside Afghanistan, Armenia, and Persia range among the probable sources of silver. Large globular silver beads were cast or beaten out. Ear-rings were made of silver wire roughly bent round. Silver bracelets were made on core like gold bracelets Copper and bronze are found side by side to the lowest levels at Mohenjo-daro. Copper may have come from Rajputana, Baluchistan or Madras. The use of bronze indicates a great advance over contemporary civilizations in metal working. Though thus superior to the Sumerians in possessing the secret of smelting bronze, Indian metal-workers could not rival the beauty and delicacy of the gold and copper objects from Ur Copper vessels were raised from sheet metal, those of bronze were cast by the circ perdue process Eves of needles and awls were formed either by drilling holes close together and then breaking the intervening material, or by bending the head over as in some pre-Sargonic needles at Kish. Copper and bronze finger-rings were generally made of coiled wire. Lead was extensively mined in ancient India, and Aimer may have supplied lead to the Indus Valley It is significant that the people of the Indus Valley were not conversant with the metallurgy of iron.

Shell is extensively used especially in the making of ornaments and pieces of inlay Moxt of the shell might have come from places along the coast of India and the Persian Gulf Mussel shell was also fairly common and was probably used as a spoon Oliva was worn as an ornament and had some magic value attached to it. Cockle shells were probably used, as in early Sumer, to hold cosmetics Mother of pearl is conspicuous by its absence, while it was used by the Sumerians for inlay Shell was apparently available in large quantities. The manufacturers experienced great difficulties in cutting shell Columella was first hollowed out by means of a saw and a hammer, and the tubular piece remaining was sawn into bracelets Beads of different shapes and pieces for inlay work

were made out of the columella, and the whole of the shell was utilized. The comparative paucity of ivory objects may possibly he due to the sanctity attached to elephants. The wild elephant. which is totally extinct in North-Western India at present, probably roamed in Sind and the Punjab in the third millennium B.C. At that period the climate of the Indus valley, if we may judge by the flora and fauna, resembled that of the Ganges delta today. Though no true glass has yet been uncarthed, the art of glazing appears to have been practised. Vitrified paste and faience were used for glazed work. Faience was extensively manufactured in the Indus Valley and is found at all levels. Ordinary articles of faicnce are composed of a white or a grevish paste, granular in appearance, coated with a glaze, which has now faded to a light blue or green Great skill in glazing is exhibited in a pottery bead covered by two coloured glazes, brown and white which was first taken to have been made of glass.

4. RELIGION

No buildings have so far been discovered in the Indus Valley which may be definitely regarded as temples, and even those doubtfully classed as such have yielded no religious relics. There are no shrines, altars, or any definite cult objects. It is indeed currous that the Indus finds do not include any positive religious material, for religion has always played a dominant part in ancient cultures, and especially in India, where it was the prime factor moulding the lives of people for ages. All that we have to rely on for reconstructing the religion of the people is the testimony of the seals, sealings, figurines, stone images, etc. In spite of the meagemenss of the material the light it throws on ancient religion is invaluable. Here we can only refer to a few leading ideas.

The first in point of importance is the cult of the Mother Goddess. A number of figurines of terra-cotta, faience, etc., portray a standing and semi-nude female figure, wearing a girdle or band round her loins, with elaborate head-dress and collar, occasionally with ornamental cheek concs and necklace; cometimes the earornaments are like caps suspended on either side of the head. Some of the figures are smoke-stained, and it is possible that oil, or perhaps incense was burnt before them in order that the goddess might hearken favourably to a netition 12 Figurines similar to those in the Indus Valley have been discovered in many countries in Western Asia between Persia and the Ægean, and also round wayside trees and village shrines in South India These figures are rightly taken to represent the Mother or Nature Goddess There is no reason to believe that the cult of the Mother Goddess originated in Anatolia or any other particular country because the concepts of the motherhood of God and of the divinity of Nature are quite common among

the primitive peoples of the world, and are wide-spread and deeprooted in India. ^{12a} The Mother Goddess is represented in evrillage as the tutelary deity (grāma devatā) and is known under various names, such as Mātā, Ambā, Ammā, Kālī, Karālī, etc., sometimes to be dreaded, sometimes warding off evil spirits, imparting fertility, etc. It may be mentioned that the Rigueda refers to Prithvī and Aditi which are akin to the Mother Goddess.

An interesting sealing from Harappa shows a nude female figure, turned upside down, with out-spread legs and a plant issuing from the womb. The reverse side has a man with a sickle-shaped knife in hand and a woman seated on the ground with hands raised in supplication. Obviously this depicts a human sacrifice to the Earth Goddess, portrayed on the obverse with two genii. A similar figure of the Gupta Age has been discovered in the United Provinces with a lotus issuing out of the neck of the goddess Perhaps the sealing represents a river gushing out of the goddess's womb. 10 The representation of a figure standing in the bifurcated branch of a pipal tree also appears to depict the Mother Goddess To this goddess the worshipper brings a goat, probably for sacrifice, and a number of people standing in the lower register seem to be taking part in the sacrifice The Pipal tree is still held to be sacred in India, but not associated with the cult of the Mother Goddess. The goat sacrifice has survived in the worship of Sakti, another form of the Mother Goddess in which the sacrifice of animals is the most characteristic feature It is still uncertain whether the female deity represented by nottery figurines was regarded as a virgin goddess or as the consort of the male god on the seal amulets

Among the male gods the most remarkable is a three-faced deity wearing a horned head-dress seated cross-legged on a throne, with penis erectus, and surrounded by elephant tiger, buffalo, and rhinoceros with deer appearing under the scat. It wears a number of bangles and has a pectoral round the neck, and an inscription of seven letters appears at the top (Pl. VII 4) This representation has at least three concents which are usually associated with Siva viz, that he is (i) trimukha (three-faced) (ii) pasupati (lord of animals), and (iii) Vooi(rare or Mahauori The first two aspects are apparent from the coal itself. The deity is sitting cross-legged in a nadmasana posture with eyes turned towards the tip of the nose which evidences the Vogićvara aspect of the deity. It has been suggested by some scholars 14 that this Siva-cult was borrowed by the Indo-Arrens from the Indus culture, but as there is a reference to Sive in the Riggeda itself. 14a Sive may not be a later intruder in the Hindu nantheon

Two more seals of Siva have been found in the course of further exactions (Pl VII 5 6) The deity is always nude save for z cincture round the waist, and has a horned head-dress. In one seal

the deity is three-faced and seated on a low dais, while the second has one face in profile; both have a sprig of flowers or leaves rising from the head between the horns. This sprig suggests that the deity so ornamented is a vegetation or fertility god—another link with siva, who personifies the reproductive powers of nature. A horned archer dressed in a costume of leaves (Pl. VII. 7) displays the divine hunter aspect of Siva

It thus appears that Siva was one of the principal detties of the people along with the Mother Goddess. His worship was, however, not merely iconic, but also phallic, as would appear from the presence of a large number of conical and cylindrical stones. These conical and cylindrical stones probably symbolize fertulity, and are connected with the cult of Siva as Lingas. Many scholars find a contemptuous reference in the Rigueda to phallus worship and regard it as a veiled allusion to the religious customs of the pre-Aryan people of the Indus Valley, but it has been suggested by others that the passage in question simply alludes to sensuous or lustful persons. 16

Small ring stones suggest that the worship of the Yoni, the female symbol of generation, was also prevalent though not to such an extent as Linga worship. It is, however, possible to take the group of ring stones as pedestals or bases of pillars. Hence until the linga and one of the ring stones are found in close association, the question of the prevalence of phallic worship cannot be definitely settled. The Vedic religion. It may be observed, was originally anneonic, the worship of cons arising at a later stage

That animal worship or zoolatry formed part of the religious beliefs of the people is indicated by the representations of animals on seals and sealings, or in terra-cotta, faience, and stone figurines The animals fall into three groups: (i) mythical animals, e.g. a semi-human, semi-bovine creature, attacking a horned tiger resembling Eabani or Enkidu in Sumerian mythology; or, complex animals, with the heads of different animals attached to a central boss, which may possibly be an attempt to bring together the representations of various deities; (ii) ambiguous animals, which are not completely mythical, like the strange unicorn, accompanied with manger or incense-burner; or animals figuring as officiant genii. The frequency with which the unicorn appears has been taken to indicate that it was the tutelary deity of the city. Lastly there are (iii) actual animals, including the rhinoceros, the bison, the tiger, the elephant, the buffalo, the humped bull or zebra the short-horned bull, etc. The feeding troughs which appear before some of these have been taken as symbolizing food offerings to beasts which could not be domesticated indicating the animals as objects of worship. Some of these animals were regarded as the vohana or vehicles of the gods. The bull for instance, is closely associated with Siva

It may be suggested that the limestone statues of animals resting on rectangular pinnths represent gods in their animal form. Possibly the unicorn has some connection with the boar incarnation of Vishnu, which is said to be eka-śrniag (one-horned).

Apart from their use as pictographic signs, no birds appear on seals or other amulets. It seems, however, that the dove was looked upon as sacred, as some of the pottery models on little pedestals exactly resemble those found at very early sites in Mesopotamia, where the dove was reserted as sacred to the Mother Goddes.

The worship of tree, fire, and water also seems to have been in vogue. The existence of tree worship is evidenced by the representations on several seals and sealings. The most interesting of these depicts the trisitle-horned deity standing nude, with long hair, between two branches of a tree with the half-kneeling figure of a worshipper with long hair, armlets, and horns, behind whom is a composite animal; in the lower register appear seven standing figures, with dresses down to the knees, in procession (Pl. No. VII. 8) The leaves of the tree appear like those of the pipal. Some sealings from Harappa show trees enclosed by a wall or a railing. It cannot at present be stated definitely whether tree worship pertained to trees in their natural state or to their indwelling spirits

Rectangular aisles, separated from each other by long walls. suggest the Vedic sacrificial altar of a rectangular shape (agmisālā paved with bricks), in which offerings were made to Fire and other gods. 16

Though no direct evidence has been found to river worship, the important part played by water in the daily life of the Indus people, as indicated by the elaborate arrangements for bathing and the Great Bath, seems to show that ceremonial ablutions formed a feature of their religion. The Great Bath has been suggested as the temple of the River-God The crocodile probably represented the river Indus The cult of the gharial survives in Sind even today.

The representations, on some seals, of Svastika and the wheel, which are the symbols of the sun, suggest that the sun was not represented anthropomorphically but symbolically. Svastika and the cross appear to be religious or magical symbols as in Babylonia and Elam

From a fasence tablet showing a seated deity with a worshipper on either side and a hooded cobra over the head, it appears that some form of Nāga worship was practised

5 FUNERARY CUSTOMS

The evidence with regard to the customs about the disposal of the dead in the ancient Indus Valley is yet far too meagre for any definite conclusions, and though Harappā records more ample

material, it relates to a period subsequent to the occupation of Mohenjo-daro.

Three forms of burnal have been found at Mohenjo-daro, viz., complete burnals, fractional burnals, and post-cremation burnals. Complete burnal means the burnal of the whole body, ceremonally performed in various forms, along with the grave furniture, offerings, etc. About 30 skeletons, evidencing complete burnals, have been found in different groups. Some of these appear to have been victums of accidental death. All these burnals appear, on stratigra-blical evidence, to relate to the declining years of Mohenjo-daro.

Fractional burial represents a collection of some bones after the exposure of the body to wild beasts and birds. Five such burials have been found, the best specimen being an urn containing a skull and some fragmentary bones, along with a number of earthenware vessels, and a variety of small objects including balls, beads, shell spoon, bits of ivory, and miniature vessels (Pl VIII. 1). Human bones are not found in all specimens, probably because after exposure bones were ground to dust belore interment.

Post-cremation burials have been inferred from large widemouthed urns containing a number of smaller vessels, bones of animals, and of birds or fish, and a variety of small objects, such as beads, bangles, figurines, etc., sometimes mixed with charcoal sahes These are generally found underneath a floor or a street. Human bones are seldom found, these generally being the bones of lambs, goats, etc., as bones are hardly necessary for post-cremation burials The uniform character of the urns, quite distinct from the domestic varieties, as also the offerings in the form of objects of special interest to the departed, and the burial of these urns within dwelling houses or in close proximity, leave no doubt as to their being burial urns These have been discovered at six places in Mohenjo-daro, distributed among strate of all periods,

6 THE INDUS SCRIPT

The Indus script has been characterized by most scholars as pictographic, but save for a small number of signs representing birds, fish, etc., and varieties of the human form, the rest bear more or less a conventional character. Originally pictographic, the signs, as we know them, have become standardized, but not so conventionalized by usage as to have become mere stereotyped summaries like the cuneiform characters of Mesopotamia During all the centuries of Mohenjo-daro's occupation, the script presents no development in the form of the letters The script is found in one stage only, so that we cannot trace its genesis from the pictographic to the ideographic or phonetic, or its later development to any of the scripts of India.

The most remarkable features of the Indus script are its clarity

and straight rectilinear character, and the extent and variety of its signs. Admirable ingenuity is displayed in modifying the signs by the addition of strokes or accents, and in combining one sign with another in the form of conjuncts. The large number of signs precludes the possibility of the script being alphabetic. It was mainly phonetic, most of the signs apparently standing for open or closed syllables, and the remainder functioning as determinatives or ideograms. Nearly 400 distinct signs have been listed from the script so far.

From the recurrence of certain characters, the facing of the animals and a few other indications, it has rightly been inferred that the direction of writing is from the right to the left, though in a very few inscriptions the direction is from left to right. In legends covering two or more lines the direction is boustrophedon.

There are resemblances between some characters in the Indus script and those in the Sumerian, proto-Elamnte, Hittite, Egyptian, Cretan, Cypriote, and Chinese scripts. Similarities have also been traced with the script of the Easter Islands, and the Tantric pictographic alphabets. All these scripts are possibly interrelated, but only up to a certain point. Some scholars even claim the Brāhmi to have been derived from the Indus script.

It is not possible, in the present stage of our knowledge to determine the language of the script. Some scholars take it to be Sanskrit and others as Dravidian. In their attempts to decipher the script several scholars have taken for granted the identity of the Indus language with one or the other of the known languages or their prototypes.11 In connection with the resemblances of the Indus signs with other scripts. Rao Bahadur Dikshit observes that the resemblance with Sumerian and proto-Elamite signs presages a close connection, at least in the formative stages; similarities with the Egyptian and Chinese pictographs are superficial, and the Indus script developed independently on Indian soil, 18 With regard to interpreting the script in terms of the Dravidian equivalents, it may be stated that we have nothing to rely on as to the original or the proto-Dravidian language: the language could not have been static during these 5,000 years. 18a Much more extensive research in Southern India, moreover, will be necessary before definite links can be forged between the later stages of the Indus Valley civilization and the dawn of civilization in Southern India.

The material at our disposal is sufficiently large, but despite earnest attempts by scholars no real light can be thrown on the subject which may find general acceptance. In the absence of a real solution that would stand the test of any and every investigator, all attempts to decipher the script will have merely an academic interest. The Indus Valley had trade relations with Sumer and Elam, and Indus seals have been found at the latter sites. It is likely that

some bilingual inscription, turned up by the spade of the archaeologist in Iraq, will give us the right clue to the decipherment of the Indus script.

7. THE ANTIQUITY OF THE CULTURE

Despite its definite individual characteristics, the Indus Valley civilization is not isolated and unique, but has sister civilizations elsewhere, with several outstanding common features, which indicate its contemporaneity with the western city cultures in Mesopotamia. At none of the sites in the Indus Valley has iron been found, which gives us the lower limit of the age on the civilization, as iron was known everywhere in the Middle East in the later half of the second millennium B.C. The civilization that we find in the Indus Valley is still of the chalcolithic age displaying remarkable similarity with the Second Pre-Diluvian Culture of Elam and Mesopotamia, and the prote-historic period of Sumer (c. 2750 B.C.)

Excavation has brought to light seven different layers of buildings at Mohenjo-daro, which have been assigned to three periods, viz. Early, Intermediate, and Late. Earlier layers he submerged under subsoil water. The phase of the hidus Valley civilization found at Mohenjo-daro and Harappa is known as the "Harappa Culture." Explorations in Sind have brought to light three different "cultures," viz., those of Amn, Jhukar, and Jhangar, the first of which preceded and the last two followed the Harappa culture. Chanhu-daro displayed races of Jhukar and Jhangar cultures in the upper levels.

On the analogies of Troy and Rome, normally a period of one thousand years should be assigned for the occupation of the seven cities of Mohenjo-daro; but as the decay at Mohenjo-daro was much quicker on account of the imminent danger of floods (of which we get evidence), and as the re-occupation of the cities was much more rapid as seen from the uniformity of antiquities in all layers, a period of only 500 years has been assigned for the whole strata. As, however, the civilization is already in a developed stage, roughly a period of 1000 years has been allotted for the antecedent evolution.

The latest settlement of Mohenjo-daro has been attributed to 2750 B.C., so that the occupation of the seven cities ranges between 3250-2750 B.C. This rough dating, however, has been brought down by a few centuries by the find of various Indus Valley objects in datable strate in Sumer and Mesopotamia

An Indus seal confined to the Late Period at Mohenjo-daro was found at Eshnunna in layers pertaining to 2600-2500 B.C., so that the early period at Mohenjo-daro reaches back to about 2800 B.C. A similar seal, however, has been found at Ur in a tomb which is not older than 2150 B C. 19 Dr Frankfort's discovery of cylinder seals of Indian origin at Tell Asmar and of a green steatite vase depicting a Brāhmani bull at Tell Agrab carry back the date of the

Indus Valley civilization to about 2800 B.C. The seals of the Indus Valley type found in Mesopotamia by Dr. Gadd indicate 2800 B.C. as the upper limit of the Harappā culture. Dr. Fabri places the main culture period at Mohenjo-daro between 2800-2500 B.C. on the evidence of a pottery jar with a Sumero-Babylonian inscription found at Mohenjo-daro. A comparison of the plan and painted ware in the Indus Valley with similar specimens at Sumer, Elam, and Egypt shows the Indus Valley civilization to have flourished about 2500 B.C. Ceramic evidence shows that the earliest stage of the Indus Valley civilization is represented at Amri, which may go back to 3000 B.C., followed by the Harappā, Jhukar, and Jhangar cultures.

On a careful consideration of all available material for the age of the Indus civilization, some of which has been indicated above, it appears that the main culture period at Mohenjo-daro or the "Harappā culture" ranged between 2800-2500 B.C. Though it must have had a long history of antecedent development before it reached the stage we meet, no idea of that period can be had, as the lowermost strata cannot be reached at Mohenjo-daro, Harappā, Jhukar, or Chanhu-daro, because of subsoil water. The civilization for all we know may well reach beyond 3500 B.C. The uppermost layers of Chanhu-daro, as suggested by Dr. Mackay, can be assigned to 2300-2200 B.C., whereas the lower strata go back to 2600-2500 B.C. The culture period of the Indus Valley civilization, as revealed by its finds, thus seems to have lasted roughly from c. 2800 to 2200 B.C. The cultures at different sites in the Indus Valley are to be placed between these two extreme dates.

8. AUTHORS OF THE INDUS CIVILIZATION

The only definite material available with regard to the authorship of the Indus Valley civilization is the human skeletons and skulls found among the ruins. As mentioned above, these show that the population of Mohenjo-daro was heterogeneous and comprised at least four different racial types, viz. Proto-Australiol, Mediterranean, Alpinoid, and Mongoloid. The Mohenjo-daro population is, however, generally believed to have mainly consisted of the Mediterranean type, which has been described before (ante, p. 145 ff.) The craniological evidence speaks not only of the diverse racial elements, but also of free racial mixture.

No accuracy or scientific precision in this respect can be expected in sculptured pieces, as the artists were not anthropologists. Whatever meagre evidence is supplied by the statuary confirms the craniological evidence as to the existence of different races

The anthropological and statuary evidence does not aid us in pointing at the authors of the civilization. There has been quite an amount of speculation among scholars and archaeologists with re-

gard to the ascription of the authorship of the indus civilization to any particular race. Words like Aryan and Dravidian which prmarily denote linguistic groups have been indiscriminately used in an ethnic sense in this connection. Thus the authorship has been ascribed to Dravidians, Brähus, Sumerians, Panis, Asuras, Vrätyas, Vähikas, Däsas, Nägas, Aryans, etc.²¹

The majority view prefers to hold the authors of the Indus civilization as speakers of "Dravidian" (ante, p. 158). So far, however, as the funeral customs are concerned it is impossible to ascribe the Indus Valley culture to the "Dravidians," among whom burial was the prevalent form of interring the dead. Further, excavation in the south has hitherto revealed no traces of the Indus Valley civilization.

The Brāhuis, though speaking a Dravdian language, are of Turko-Iraman origin, and are ethnically quite distinct from the various peoples speaking Dravdian languages in Central and Southern India. There is no definite evidence to support the Brāhui authorship of the Indus culture.

We know nothing definite as to the racial features of the Sumerians. They were no doubt, in close contact with the Indus Valley in ancient days, and probably formed part of the population at Mohenjo-daro; but there is nothing to credit them with the authorship of the Indus culture.

As regards the Panis, Vrātyas, Vāhīkas, Asuras, Dāsas, and Nāgas, we have no material to identify them with any of the known races.

Sir John Marshall has compared the Vedic civilization with that of the Indus Valley and has found that they are quite distinct; and as the entry of the Aryans into India, according to his view of the date of the Rigoeda, is subsequent to 1500 B.C., more than a thousand years after the last vestige of the Indus Valley Civilization disappeared, he cannot think of the Aryans in connection with the Indus Valley civilization.

Now the presumed age of the Rigueda is really no barrier to the Aryan authorship of the Indus culture (if other evidence proves that hypothesis) for, in the first instance, that age is not known with even an approximate degree of certainty, and secondly, because the Rigueda can safely be taken to have represented a period long posterior to the advent of the Aryans into India. As to the existence of the Aryans in the Indus Valley at so early a period as the age of the Indus culture, it is held by some, on the evidence of skeletal material, that the Aryans formed part of the diverse population of these days.²²

Various arguments have been advanced by Sir John Marshall in order to prove that the Indus Valley civilization was quite distinct from, and earlier than, the Vedic civilization. One lost this principal arguments, viz., the borrowing of the Silva cultud Mohanja.

daro by the Vedic Aryans, has been noted above. Among others may be mentioned the absence of the horse and presence of icons. As regards the first, Dr. Mackay takes the model animal illustrated in Pl. VIII. 2 to represent a horse, and has conjectured that the Indus Valley people probably knew the horse at about 2500 B.C. at the latest. The finds of saddles in some of the lowest strata at Mohenio-daro, and the representation of the horse in the Indus Valley art seem to prove that the horse was known.23 As to the second, it is true that the Vedic religion was aniconic to a very great extent. But it is not unlikely that the Rigueda represents an earlier phase of the culture found in the Indus Valley. The use of icons in the Indus Valley, as seen in the phallic cult, probably followed in the wake of Siva worship in the Riqueda. Later on, owing to contact with alien or non-Arvan elements, some concepts such as phallic worship, magic and charms, etc., were perhaps incorporated in the comprehensive Hindu religious system. Similarly, the Mother Goddess (Adıtı and Prithvi in the Rigveda) and Siva were developed in the period of the Indus Valley by synthesis and fusion with non-Aryans. There was thus a co-mingling of cultures, Vedic and non-Vedic, and for the authorship of the composite Indus Valley civilization, we need not look to any particular race.

Although Sir John Marshall's view is now generally accepted. some scholars still regard the Vedic civilization as older than that of the Indus Valley. It is impossible, at the present state of our knowledge, to come to any definite conclusion, but it has to be admutted that there is no conclusive evidence against the view that ascribes the authorship of the Indus Valley civilization to the Rigvedic Arvans, and regards it as a logical corollary, a lineal descendant, of the culture described in the Rigueda. But even then the authorship of the Indus Valley civilization cannot be ascribed to any particular race, as every element in the diverse population contributed its share to the civilization. Even assuming that the Rigvedic civilization was earlier, we must remember that during the period that intervened between it and the Indus Valley civilization, the Vedic religion was incorporating many alien and non-Arvan features such as phallus worship, Naga worship, magic and spells, etc., and was already tending to become comprehensive, composite and all-embracing harmonising different constituent elements and catering to the needs of the various strata. It would not, therefore, be correct to ascribe the authorship of the Indus Valley culture to the Aryan or any other particular race. It represents the synthesis of the Aryan and non-Aryan cultures. The utmost that we can say is that the Rigyedic Aryans probably formed an important part of the populace in those days, and contributed their share to the evolution of the Indus Valley civilization.

9. EXTENT, CONNECTIONS, AND SURVIVALS OF THE INDUSCIVILIZATION

The very fact that Mohenjo-daro and Harapoa, the first two prehistoric sites excavated in the Indus Valley, although about 400 miles apart, present a homogeneous culture, shows that the civilization was neither local nor regional, nor confined to any restricted area. Subsequent excavations in a large number of other sites have brought to light prehistoric antiquities representing the identical civilization, and these indicate that Mohenjo-daro and Harappa do not mark the extreme limits of its extent. The late Mr. N. G. Majumdar's exploration in Sind revealed various settlements of the Indus Valley civilization in many places in Sind, from the modern Hyderabad, 60 miles north-east of Karachi in the south to Guio. Vijnot, and Jacobābād in the north, forming a long chain of mounds between the present course of the Indus and the foot-hills of the Kirthar range The annexed map (No. 2) shows that these prehistoric sites follow the old lines of communication between southern and northern Sind through the hill range. Chanhu-daro, over a hundred miles south-east of Mohenjo-daro, and Amri, the same distance down-stream from Mohenjo-daro, are important sites at which the same civilization has been found. On the west bank of the Indus, Lohumio-daro, Ali Murad, Jhukar, Ghazi Shah, Alor, etc. are the principal sites from which several objects of the Indus culture were recovered. Further west, Sir Aurel Stein's explorations have proved the extension of the Indus Valley civilization to Dabar Kot, Sur Jangal, and Periano Ghundal in Northern Baluchistän and Kulli and Mehi in Southern Baluchistan. According to Stein, Shahi Tump marks the outpost of the Indus Valley civilization.24

Terra-cottas recovered at Buxar and at Pāṭaliputra (Patna) indicate the extent of the cultural influence of the Indus Valley eastward ²⁵ In the Ghāzipur and Benares districts were found pictographs, carnelian beads, and objects exactly similar to those found in the Indus Valley. There are various ancient sites in the United Provinces in the Gangetic basin from which relies of copper civilization have been recorted.

Kotla Nihang Khan, near Rupar on the Sutlej in the Ambāla district below the Simla hills, about 220 miles due east of Harappā, also records finds typical of the Indus Valley sites.

Thus the Indus Valley civilization seems to have embraced the whole of Sind and the Punjab, the bulk of Käthiäwär, a part of the coastal region, the valleys of North-west Frontier province, and a part at least of the Gangetic basin.²⁰

The extent of the Indus Valley civilization indicates its connections practically with the whole of Northern India, and in the west, with all the contemporary cultures. Immediately the dis-

coveries in the lndus Valley were published. Sumerologists came forward with affinities of the Indus Valley civilization with Sumer. and at the outset the Indus Valley civilization was designated Indo-Sumerian. But despite its close contact with ancient Sumer, the Indus Valley civilization has peculiarities of its own. It has recently been shown that the similarities between the two cultures have been over-emphasized and the differences overlooked. At any rate there is an overwhelming mass of evidence showing that a flourishing trade, probably through the land routes in Baluchistan, existed between the Indus Valley and Sumer in ancient times. Numerous seals of Indian design and workmanship have been found at various Sumerian and Elamite sites. Importations from Sumer recovered in the Indus Vailey, however, are comparatively very few. A white marble seal an engraved steatite vessel, an etched carnelian bead, a model ram, an adze axe, and small pottery rings used as net-weights have been recorded as probable importations from Sumer, indicating trading intercourse. The most important piece of evidence testifying to the influence of the Indus Valley on Sumer is the fashion of hair-dressing adopted by Sumerian women from the Indus Valley.27

For associations with Egypt, however, we have to depend only on indirect connection suggested by certain objects and motifs. No definite object of Egyptian workmanship has been found in the Indus Valley, nor has any Egyptian site recorded an Indus Valley object. Segmented beads and hemispherical terminals of necklaces, bull-legged stools, small model beds with recumbent female figurines, female figurines suckling a child, faceted beads, fly-shaped beads, cord designs, candle stands and mussel-shell-shaped spoons, are among the various objects that link the Indus Valley and Egypt. The borrowings appear to have taken place through Sumer and Ellam as intermediaries.

Though Steni's researches clearly show that the population of Baluchistān was far greater than it is now, and that various land routes through Baluchistān were extensively used in ancient times for trade purposes, it appears probable that the Indus Valley people also used sea-routes, despite lack of corroborative evidence.

Before dealing with the survivals of the Indus Valley civilization, we may consider the causes that led to its decay and disappearance. The progressive desiccation of the lower Indus Valley was the main cause of the evacuation of the Indus cities. The growing danger of floods was certainly responsible for the evacuation of Mohenjo-daro. The Indus floods, however, cannot account entirely for the desertion of the Indus settlements, though possibly climatic changes were an important reason. There is a remarkable dearth of means of defence both structural, such as walls, turrets, etc., and mechanical such as weapons etc., and it is probable that these rich.

unguarded cities, with their unwarlike mercantile population, were sacked by invading tribes, some of whom may have been Aryans. The skeletons found at Mohenjo-daro bear out this conjecture. A similar fate overtook the palace of Minos at Crete.

The discovery of the Indus Valley civilization has pushed back the history of India to the period 3000-2500 B.C. if not earlier still. It is generally believed that there is a highly in Indian culture of at least 1000 years, up to c. 1500 B.C. when the Arvans set foot in India. It will be shown later (Ch. XIV) that according to the traditional history of the Hindus as recorded in the Puranas, ancient history ends with the Mahabharata war, which was fought in c 1400 B.C, and goes back to the period immediately after the Flood As Mohenjo-daro culture is a post-Flood event, we may hold that there is a continuity of historical traditions right from the Mohenjodaro period down to the Mahabharata war, and these grow more and more reliable as we come to later times ending in the Gupta Age (fourth century A D).

Punch-marked coins, with their symbols reminiscent of the Indus Valley script, and with their standard of weight conforming to the weight system at Mohenio-daro, constitute an important survival of the Indus Valley dating from before 400 B C The die-struck and cast varieties of ancient Indian coins appear to be indebted to the Indus Valley for their form Some of the motifs, designs, shapes and forms found in the pottery and terra-cotta objects at Mohenjo-daro and Harappä find their counter-part in the objects discovered in the Punjab and the North-West, belonging to the early centuries before the Christian era. In the field of religious symbols, it may be suggested that the horn-crown on the head of Siva Pasupati in the Indus Valley has survived as a symbol of great significance in the nandinada and the images of Siva as Dakshinamurti and of Buddha as Yogi are due to the influence of the Indus culture

These instances indicate that there was probably no complete break or hiatus after the Indus Valley civilization

GENERAL REFERENCES

MACKAY, E J H Further Excusations at Mohemo-daro Two vols Delhi, 1938 MAJUMDAR, N G Ernforetions in Sind MASI No 48 Delhi, 1938 MASHALL, SIR JOHN Mohemo-daro and the fudus Civilization Three vols

London 1931 VATS, M S. Ercavations et Harappa Two vols Delhi, 1940

NALO, M.S. Extremenous of proteins I'WO vois Delth, 1940

1 The name Mohemo-daro has been variously interpreted to mean "the mound of the dead" (Moh. Ind., P. I), "the mound of the confluence" (IRAS 1932 p. 458, fn. I), "the mound of the killed" (Mahan-yo-Daro, p. I) or "the mound of Mohan"

lo I. Martyng, p. 13.
2 Moh. Ind., p. 274 (Mackay), 274, In 2 (Marshall) Martwela, Ancient Sind, p. 9
3 Carleton, Burnod Empires, p. 151
4 Childe, New Light, p. 299, Dikshit, Freh. Cut., p. 25

4a. Harappa, p 6 5 Mackay, BMFA, XXXIV. p 91, cf Chan-d, p 235

- Cf. Chan-d., pp. 236 ff.
 Cf. Dikshit, Preh Civ., pp. 31-2.
 Carleton, Buried Empires, p 154
- 9. Script, p. 32.

- on account of their analogy with later metal righres in South Rota holding on account of their analogy with later metal rights of the Mother Goddess was imported by the Dravidans from the West

 10. C. Childe, New Light, p. 222

 14. Cf. Ch. X. below, p. 203, and Ch. VIII, above, p. 181.

 15. Cf. Pusaller, Prichypothi, 1, pp. 29-31

 16. Cf. Pusaller, Prichypothi, 1, pp. 29-31

 17. Cf. Sandanta, Rucal Synthesis in Finda Culture, p. 26

 17. Viswantaha, Rucal Synthesis of Honda Culture, p. 26

 17. Herra, Hertz, Hevesy, Hrozny, Hunber, XXII, XXIII) and articles by Fabri, Herra, Hertz, Hevesy, Hrozny, Hunber, Mengd, Otto, Petrie, Piccoli, Pran Nath, Ross, Sankaranand, Santri and Waddell in the Bibliography.

 18. Fee after, Ct. VIII. p. 158 ff.

 19. Culticton, Bured Empires, p. 145.

 19. Culticton, Bured Empires, p. 145.

 10. Culture, See Moh. Fud. Chanda, Chathad, Chathada, Chatterj, Hersa, Ketth, Law, Marivalla, Mooderj, Pusallare, Cadell, Chanda, Chatterj, Hersa, Ketth, Law, Marivalla, Mooderj, Pusallare, Cwelkateware, Sankarananda, Saruy, Sastri, Shembawackar, Sur, and Waddell in the Bibliography
- Bibliography
 22 Datta, Rigredic Culture of the Prehistoric Indus, Foreword, p XXV, Chau-

- 22 Data, Ripress Chairre of the Prensione mains, Foreword, p. XXV, Chaudhuri, CR, June 1945.
 24 II. Childe, New Light, p. 210
 24 II. Ali, 64, p. 183.
 25 II. Bills, III, pp. 187-81.
 25 II. is suggested that the civilization extended southward into the Hyderabad State, the Karmalak, the Nilgiris, the Tunnevly district and even as far as Ceylon (JIH, XVI, p. 12); but the evidence is far too meagre to justify the
- 27 Cf Carleton, Buried Empires, p 161

BOOK THREE THE ARYANS IN INDIA

CHAPTER X

THE ARYAN PROBLEM

It was the Florentine merchant Filippo Sassetti who, after five years' stay in Goa (1583-1588), declared for the first time that there existed a definite relation between Sanskrit and some of the principal languages of Europe. But that this relation is due to origin from a common source was suggested only in 1786 by Sir William Jones in his famous address to the Asiatic Society of Bengal. He thus established the common origin of a number of languages such as Greek, Latin Gothic, Celtic, Sanskrit, Persian, etc., to which the scholars have given the name Indo-European or Indo-Germanic. and therewith laid the foundation of the Science of Comparative Philology. The third and the final step in formulating the Aryan problem was taken by Max Müller, who declared in emphatic terms: "Arvan, in scientific language, is utterly inapplicable to race. It means language and nothing but language; and if we speak of Arvan race at all, we should know that it means no more than X + Aryan speech."1 This purely linguistic formulation of the problem was. however, never fully accepted by the learned or the laity. On the contrary, a romantic reaction, which identified language with race. set in soon and was given powerful expression by Penka who declared language to be "the organic product of an organism subject to organic laws "2 The linguistic world of the last century was thus sharply divided into two schools of thought, as old as the Greeks of the classical age, who also were unable to decide whether language is a phusis (inborn quality) or merely a thesis (acquired habit) 3 Today Müller's school is dominant no doubt, but Penka's is yet far from discredited, for it is now realized that, though by no means determined by race, yet, as a social phenomenon, a language can assume its particular aspect only within a particular society. and that in those very early times when the original Indo-European language was gradually taking shape, such a particular society could have been based only on racial affinity, purely cultural bonds being out of the question. In fact, at the beginning, every natural language must have been confined within a not too large racial group-though it by no means follows that there could not have originated more than one language within one racial group at the beginning. It is clear, therefore, that the race-question if rightly understood is by no means irrelevant to the Arvan problem Only it is necessary to remember that the racial group, within which the primitive Indo-European language originated, may have itself adopted a non-Indo-European language in course of its history, or may have altogether passed out of existence. Ours will therefore be a

double task: to try to identify anthropologically and locate geographically the primitive racial group within which the basic Indo-European language, as reconstructed by Comparative Philology, had originated.

There being-in spite of Penka and his school4-no organic relation between language on the one hand and race and geography on the other, our method cannot but be empirical. And the obviously most important empiric fact about the known Indo-European languages is that quite a large number of them are crowded together within the comparatively small space of Europe, covering practi cally the whole of that continent, whereas outside Europe, instead of a compact body of idioms of that speech-family are found only scattered members of it, stretching out, as it were in single file, between the Semitic and the Altaic-Finno-Ugrian linguistic areas, and ending, at least in the age of the earlier Rigveda, in the region of the Punjab. The geographical distribution of the idioms of the Indo-European speech-family, therefore, does suggest that the original home of the Indo-Europeans is to be sought rather in Europe than in Asia Moreover, of all the living Indo-European languages of the present day, it is Lithuanian, and not Sanskrit (even if considered a living language) or any of its daughter dialects, that has kept closest to the basic idiom reconstructed by Comparative Philology

These two fundamental facts make a strong prima facte case against the theory that India was the original home of the Aryans This view, though highly favoured at one time, has not many supporters now, though some Indian scholars still tenaciously cling to it. Their views and arguments have been summarized in the Appendix. The reader will find a refutation of some of them in course of this chapter. But while no definite conclusion about this much-debated problem can yet be reached, it may be reasonably urged that had India been the original home of the Aryans they would have certainly tried fully to Aryanize the whole of this sub-continent before crossing the frontier barriers in quest of adventure.

The fact that the whole of South India and some parts of North India too are to this day non-Aryan in speech is the strongest single argument against the Indian-home hypothesis, especially as the existence of a Dravidian speech-pocket (Brāhul) in Baluchistan clearly suggests that the whole or at least a considerable part of India was originally non-Aryan in speech. The cerebral sounds of Sanskrit which sharply distinguish if from all the other Indo-European speech-families, including Irānian, are best explained as the result of Austric and Dravidian influence on the language of the incoming Aryans. Could it be proved that the language of the prehistoric Mohenjo-daro culture was Sanskrit or proto-Sanskrit then indeed it might have been possible to argue that in spite of

THE ARYAN PROBLEM

all the evidence to the contrary India was the original home of the Aryans, for there is no definite proof of the existence of an Aryan race or language outside India previous to the age of the Mohenjo-daro culture. But the Mohenjo-daro seals being still undeciphered, we cannot, for the present, hazard any opinion on this subject.⁷

Many scholars hold the view that the Vedic culture was fundamentally different from that of Mohenjo-daro, and later in date. This question has been discussed above,8 but special stress may be laid on one point. On the evidence of a well-known plaque discovered at Mohenjo-daro, Sir John Marshall declared that the cult of Siva-Pasupati (= Rudra) was borrowed by the Vedic Arvans from the Mohenjo-daro culture. Now, it is hardly an accident that precisely this Rudra-and no other deity-is regarded in Vedic cult and religion as an apotropaeic god of aversion-to be feared but not adored.9 Offerings to all other gods are sacrificed into the fire. but those to Rudra and his servants (Rudrivas) are simply deposited at cross-roads or various forbidding places 10 Rudra and the Rudriyas are, therefore, in every respect analogous to the Theoi Apopompaio: of Greece, the gods of the pre-Hellenic autochthonous population of that country.11 Should not the Rudra gods, too, be regarded in the same way as gods of the pre-Aryan population of India? But to admit that would be to confess that the Mohenjodaro people were not Aryans It is true, as noted above, that Sir John's view is not accepted by all. 12 But if the oldest traceable civilization of India be regarded as of non-Arvan inspiration, the conclusion becomes almost irresistible that the Arvans had come to India from outside

But why consider the Mohenjo-daro civilization to be the oldest raceable civilization of India? What is there to prove that the Aryan culture of Rigvedic India was not older than the culture represented by the ruins of Mohenjo-daro? Thus arises the great question of the age of the Ragueda, which, however, in the present context can but be touched in passing on the background of the general problem of the first emergence of the Aryans into the light of history.

From a purely linguistic point of view the Riqueda in its present form cannot be dated much earlier than 1000 B.C. The language of the Riqueda is certainly no more different from that of the Avestan Gäthäs than is Old English from Old High German. and therefore they must be assigned to approximately the same are: and the relation between the language of the Gäthäs and that of the Old Persian inscriptions of the sixth century B.C. cannot be better visualized than by comparing the former with Gothic and the latter with Old High German. Now, if the inscriptions of the Achaemenid emperors of Irān were composed in Old High German

what would be the date assigned to Ulfilias' Gothic Bible? Surely something like 1000 B.C. This then would be the approximate date of the Gāthās of Avesta¹³—with which the Rigreda in its present form must have been more or less contemporaneous. Thus from general linguistic considerations we get for the Rigredic language, as known to us, an approximate date of 1000 B.C.¹⁴ Although the culture represented by it must be considerably older, it can hardly be pushed back considerably before 1500 B.C. The Rigredic language, with its date of about 1000 B.C, therefore, furnishes the terminus ad quem and the Mohenjo-daro culture of about 2500 B.C. the terminus ad quem and the Mohenjo-daro culture of about 1000 G.C, the terminus ad quem and the Mohenjo-daro culture of about 2500 B.C. the terminus a quo of the first Aryan invasion of India in order to ascertain the extra-Indian (as shown above) original home of the Aryans we shall now discuss the earliest datable traces of their eastern tribes (the Indo-Irānians) and then try to follow up the indication of those traces quirther back

The earliest indubitable trace of a definitely characterized Indo-Iranian language of the Indo-European family is to be found. as is well known, in the names of the four Vedic gods Mitra, Varuna, Indra, and the Nasatyas (in slightly different forms) occurring in records of treaties, discovered at Boghaz-köi, between the Hittite king Shubbiluliuma and the Mitanni king Mattiuaza of about 1400 B C.15 It is very significant that the determinative "god" in the plural has been placed before each of the two names Mitra and Varuna, for the purpose of this plural determinative could have been only to suggest that the two names formed a Dvandva comnound-just as in Vedic Sanskrit 16 Vet it will be wrong to conclude from these names that the language from which they were borrowed was nothing but our Vedic Sanskrit, and to regard the minor differences¹⁷ as due solely to the inadequacy of the Akkadian syllabary used by the Hittites. For the numerals (aska, tera panza, satta), occurring in a manual of chariot-racing composed in the Hittite language by a Mitannian author named Kıkkuli likewise discovered at Boghaz-koi, clearly point to an archaic Indo-Iranian dailect which was not yet fully characterized either as Indo-Aryan or as Irānian

On the other hand it is equally difficult to accept the view of the writer in the Cambridge Ancient History that here we have in the fourteenth century B.C. the undifferentiated Indo-Iranians "who at a later period formed these two important Indo-European stocks," 18 For if the forefathers of the Vedic Aryans were still in Cappadocia in the fourteenth century B.C. on their march towards India, there would be no time left for them to forget all their previous history before giving the final form to the Rigwedic hymns not later than 1000 B C.: it really cannot be proved that the Vedic Aryans retained any memory of their extra-Indian associations.

THE ARYAN PROBLEM

excepting perhaps a camouflaged reminiscence of their sojourn in Iran. 19

But Boghaz-köi is not the only place yielding definite proof of the existence of an archaic Indo-Irānian speech-form about 1400 B. The clay tablets with Babylonian cuneiform script discovered at El-Amarna in Egypt²⁰ have revealed the fact that numerous dynasts with Indo-Irānian-looking names (such as Artamanya, Arzawiya, Yasādata, Suttarna, etc., ni which no specifically Indo-Aryan or Irānian feature is perceptible), were ruling in Syria about the same time. Linguistic evidence derived from regions as distant from each other as Cappadocia and Syria, therefore, definitely proves that about 1400 B.C there existed in those regions archaic Indo-Irānian speech-forms which are undoubtedly older than the oldest Avestan or Sanskrit known to us.

But it is possible perhaps to reach back still farther. About 1760 B.C. Babylon fell into the hands of the Kassites who are known to have used the word "šurīaš" to designate the sun.22 This is the oldest attested word of definitely Indo-Iranian stamp which was perhaps borrowed by the Kassites from the Indo-Iranians before they dispersed from their common home, as suggested by Herzield.2. But the evidence of this solitary word of Indo-Iraman origin cannot be regarded as adequate proof of the existence of Indo-Iranians in western Asia already in the eighteenth century B.C. Nor does the joint testimony of this word and the Indo-Iranian names of the Syrian dynasts of the fifteenth century B.C. warrant the assumption that the Indo-Iranians, already as a specifically characterized Indo-European tribe, entered Asia from Europe over the Caucasus, and after occupying Iran pushed on farther to the Punjab, as was held by Hirt.21 For even though the general movement of the Indo-Europeans in Asia might have been from west to east, yet it should have been quite possible for some Indo-Iranian-speaking tribes to sweep over western Asia in a back-surge of invasion.

This is precisely the view expressed by Eduard Meyer²⁶ who, on historical grounds, has tried to show that the point from which the Indo-Irânians began to spread eastward into the Punjab and westward into the Mesopotamian world, is to be sought somewhere in the region of the Pâmr plateau, What Eduard Meyer urges against Hirt's theory is worth quoting: "There are, however, very grave difficulties in the way of accepting this theory. Precisely those regions in which according to this theory, these (Indo-Irânian) tribes should have settled down at first—and which in the historical period should have been the theatre of their activities—should then have been so completely evacuated by them that not a single trace of them was left behind. For among the numerous personal and place-names handed down to us from Armenia up to

the end of the Assyrian age there is absolutely nothing Indo-European, and even the frontier mountains of Media are inhabited by non-Indo-Irânian tribes: it is quite apparent that the Indo-Irânian Medes have here gradually pushed forward from the east and attained supremacy. On the other hand, although positive proof is wholly lacking, it is quite impossible to assign for the beginnings of the Vedic age—and of the specific Indo-Aryan culture beginning therewith—any date later than 1500 B.C.*27

This theory of a westward migration of the Indo-Iranians from their common home, so ably presented by Eduard Meyer28 to explain the apparently simultaneous beginning of Vedic culture in India and the appearance of Arvan princes in Mesopotamia (Mitanni), Syria, and Palestine about the middle of the second millennium B.C., was shared also by Oldenberg29 and Keith.30 Johannes Friedrich, too, at least conceded the possibility of a westward movement of a small body of Indo-Iranians.31 Most emphatic on this point is, however, Wilhelm Brandenstein, who says-without however offering any new argument of his own-"there can be no doubt that also Indians (probably Vedic Indians) have lived in Further Asia."32 On the whole it is quite clear that the Indo-Iranians advanced not only into India but also spread westward from their common home that was situated probably in the Pamir region (Meyer) or in Russian Turkestan (Herzfeld). And the dispersal of the Indo-Iranians from their original home should have begun about 2000 B.C., since the Indo-Aryans had become completely Indianized when the Rigvedic culture started on its course as a distinct product of the Indian soil about 1500 B.C. Starting from this we shall now discuss the larger problem of the original home of the Indo-Europeans.

With the possible exception of Luvian, of which we know very little, Hittite is the oldest known Indo-European dialect.³³ Yet, Cappadocia in Asia Minor, the seat of this oldest attested (from about 1900 B.C.)³⁴ Indo-European language, cannot claim to have been the Indo-European original home; for, as Gotze³⁵ has shown, the pre-Hittite Assyrian commercial colonies of Cappadocia, after an uninterrupted flourishing existence of about one thousand years, came to an abrupt end about 1950 B.C., apparently due to Hittite invasion. The Hittites, therefore, came to Cappadocia from outside, but they could not have come from very far, for the earliest theatre of Indo-European historical activity could not have been too distant from the Indo-European original home.

The date 1980 B.C. practically certain for the Hittite invasion of Asia Minor, is of great importance for Indo-European prehistory, for the Indo-Irânians, too, should have reached their common home (in the Pāmir region or in Russian Turkestan, see supra) about that time since to account for the beginning of the speci-

THE ARYAN PROBLEM

fically Indian Vedic culture about 1500 B.C. no date much later than 2000 B.C. can be postulated for the occupation of their common home by the Indo-Iranians.

Now if the two oldest known Indo-European tribes, the Hittles and the Indo-Irānians, appear about the same time (c. 2000 B.C. in Cappadocia and Central Asia respectively, then it will be reasonable to conclude that the original home whence both the Hittites and the Indo-Irānians came was more or less equidistant from Cappadocia and Central Asia. Hence follows that neither India nor Central or Western Europe could have been the original Indo-European home.³⁶

For our problem it is now of capital importance to enquire from which direction the Hittites entered Asia Minor. On the ground of similarity between prehistoric ceramics of about 2800 B C discovered in Eastein Anatolia and Macedonia, Götze concluded that the "Indo-European Hittites" entered Asia Minor from Europes" after crossing the straits.³⁵ But this theory does not, and cannot, explain why in the historical period the Hittites were settled not in Western but in Central and Eastern Asia Minor, and it is not without reason that Eduard Meyer³⁵ suggested instead that they came from the east

Of the other Indo-European languages of Asia, special importance, for the Aryan problem, attaches to Tocharian-a late attested (from the fifth to the tenth century A.D.) Centum language of Eastern Turkistan,4 of which the relation with other Indo-European languages and the basic idiom has been fully discussed in a remarkable article by Professor Benveniste 41 Before the discovery of Tocharian it was possible to maintain-in spite of the fact that the Galataeans (Celts) invaded and occupied Asia Minor in the third century B C-that on the whole all the Centum languages are to the west and all the Satem languages are to the east of the Vistula, and on the basis of this seemingly correct observation Hirt 12 built up his ingenious theory that before their final dispersal the Indo-Europeans should have been settled on both sides of that river. which itself was apparently the main cause of the Satem-Centum dialect-split.45 Now, however, after the discovery of Tocharian, Hirt's theory can no longer be maintained For Benveniste has shown that Tocharian, which like Hittite had been characterized as a distinct dialect even before the Satem-Centum split had taken place, was originally at home far to the east of the Vistula.

Of the Indo-European languages of Europe, Lithuanian, as already stated above, is certainly the most archaic. Organically, as a definitely characterized Satem-language, it must be considered of later origin than Hittite and Tocharian, and yet in external appearance (flexions and endings) it looks older than even these. This appearant contradiction can be explained, so far as can be seen,

only on one hypothesis: it is necessary to insist that it is a hypothesis pure and simple and nothing more: an Indo-European group bodily came to Lithuania after the Satem-Centum dialect split, and there in the backwoods started a long but uneventful national life in practically complete isolation, affording their language little opportunity to change and progress, while to all the other Indo-European-speaking countries came not so much the Indo-Europeans themselves as their languages. In other words, though Schmidt's wave-theory of the spread of dialects should be retained for the other Indo-European dialects, yet, so far as Lithuanian is concerned, we should accept Schleicher's older family-tree theory.

This is frankly speculative, but nevertheless we shall have to accept it, unless we refuse to face the problem. And if we accept it we shall have also to admit that the Indo-European original home could not have been very far removed from Lithuania, for bodily movements of peoples over long distances could not have been possible in those early times excepting over a long period of class and contact with alien races and speeches, as the result of which the language of the immigrants could not but have been profoundly modified 45. It is necessary to remember in this connection that the Lithuanian speech-area of mediaeval Europe extended much iarther to the east than it does today. And the fact that Lithuanian loan-words in Finnish are more numerous than the Slavic ones in that language clearly suggests that in prehistoric times the Lithuanian speech-area extended much farther still to the east, perhaps separating the Slavis from the Finns, as suggested by Hirt.⁴¹⁰

The oldest attested Indo-European language of Europe, namely Greek, is frankly an import from outside. As riall4, aptly says, "Like Sanskrit, Greek, with all its entirely Indo-European syntax and grammar, has a vast non-Indo-European vocabulary. The reason was the same in both cases. In both lands the invading Wiros (i.e. the Indo-Europeans) found a previously existing non-Arvan race with which they mingled, the Hindus with the Drayidians, the Greeks with the Minoans, and in both cases, while the language of the conqueror prevailed, that of the conquered supplied innumerable names and words to its vocabulary. In both countries the conquered race continued to exist side by side with the conquerors, the dark Dasyus with the fair Arvans, the dark Minoans with the fairer Hellenes." It is generally admitted today that the rulers of Mycenaean Greece of the fourteenth and the thirteenth centuries B.C. were not of Greek stock and did not speak Greek. The first Greek-speaking people of Greece were the Achaians, who appeared on the scene about 1200 B.C. after the decline of the Mycenaean civilization, and adopted Mycenaean culture.48 The Indo-European speaking tribes should therefore have entered Greece for the first time only about 1200 B.C.49 But there

THE ARYAN PROBLEM

is nothing to tell us from what region precisely the Greek tribes came.

Thus the most archaic (Lithuanian) as well as the oldest attested (Greek) Indo-European language of Europe fails to make out a definite case for an European original home of the Arvans. The other European languages of the same family need not be discussed for a solution of the Aryan problem from the linguistic point of view, for they are all violent variations of the original Indo-European, particularly Germanic and Celtic. In spite of this inconvenient fact a Germanic home theory has been always very popular with many eminent European scholars for racial reasons. It is argued by them that the interior of the Germanic countries-particularly Scandinavia-cannot be proved to have been ever occupied by an alien race. If yet the Germanic tribes have always spoken an Indo-European tongue-so it is asserted, because it is impossible to prove the contrary-then it will have to be assumed that Indo-European speech came into existence on Germanic soil, and that is to admit that Germany or some Germanic country was the original home of the Aryans.50 This is in a nutshell the chief argument put forward by protagonists of the Germanic home theory. The inspirer of this school of thought was Penka, who passionately protested against the tendency of ethnologists to accept meekly the findings of philology,51 Penka's attitude is, however, irrational. The Arvan problem, as formulated by Max Muller, is a purely linguistic one, and it can be connected with ethnology only in the restricted sense explained at the beginning of this chapter. But the primary significance attached to the term "Aryan" by Penka is the physical type represented by the Scandinavians! It is not to be wondered, therefore, that starting with this assumption Penka succeeded in proving, at least to his own satisfaction, that Scandinavia was the cradle-land of the Indo-Europeans.52

Modern supporters of Penka's theory have altogether dropped the linguistic argument and tend to concentrate on prehistoric archaeology. Thus the West Baltic coast has been regarded as the home of the Aryans, chiefly on the ground that the oldest and the simplest artifacts of the period following the palaeolithic age, as well as tasteful and technically perfected stone implements, are found there in abundance. He is that he is that in that case the equally numerous and handsome stone artifacts of New Zealand would be an evidence for the high antiquity of Maori culture. Much stress was again laid on the geometric patterns on prehistoric pottery in Central Germany which were regarded as of Indo-European creation. But apart from the validity of this assumption, the discovery of similar patterns on the prehistoric pottery of South Russia, Poland, and Tripolje (Ukraine)

which were older than those of Germany negatives the theory of an original Aryan home in Germany.⁵⁶

Indeed, the antiquity of Tripolje pottery, which may be dated in the third millennium B.C., has induced Nehring to formulate the view that Tripolje culture is the culture of the original Indo-Europeans, and in his opinion "the Indo-European original home lay indeed also in South Russia, but extended far beyond to the west." That it could not have comprehended any part of Western Europe is pretty certain, for H. Güntert'os and F. R. Schröder-'o have shown that Western Europe is one of those areas that were Aryanized last. Pokorny, too, by applying his substratum theory that a later language is aways fundamentally modified by the older language over which it spreads, came to the conclusion that "as the original home of the Indo-Europeans before the dispersal of the tribes (c. 2400 B.C.) should be regarded the wide stretches of land between the Weser and the Vistula and beyond these up to White Russia and Volhvinia. "81

The region indicated by Nehring as the Indo-European cradleland is indeed rather too wide, but from the present-day standpoint of Comparative Philology it would be absurd to think that the original Indo-Europeans "must have lived for long in a severely restricted area," as Giles⁶² was inclined to believe. Striking isoglosses 63 clearly show that various movements must have taken place among the different Indo-European tribes before they finally parted company. Brandenstein's researches (see below) are in this regard of capital importance. Nor can it be doubted that the later Indo-Europeans, even before final dispersal, had ceased to be racially homogeneous, and therefore the question whether the Indo-Europeans were blondes or brunettes cannot be regarded as strictly relevant. In recent times the Arvan problem has been hopelessly mixed up with the race question by European scholars of a certain school of thought, who, failing to achieve their object with the help of linguistics and archaeology, have adopted racial anthropology as their chief weapon of battle. Starting with the assumption that blonde hair was the chief characteristic of the Indo-Europeans they have naturally chosen Germany as the Indo-European cradle-land, and adduced as proof in support of their theory, various facts such as that in Greek mythology Appollo has been called blonde and some prominent Romans (such as Cato the Censor and Sulla) have been described as "red-haired" or "golden-haired" by Plutarch. It hardly needs to be pointed out that red hair was regarded as something unusual and exceptional by the Greeks and Romans, and for that reason only attracted public attention in Greece and Rome. Blonde hair was known also in India. In fact, the grammarian Patañjali⁶⁴ declared blonde hair to be one of the essential qualities in a Brähmana. True Brähmanas, therefore should have been blondes

THE ARYAN PROBLEM

in the pre-Christian era. And yet India, the land of the Brāhmaṇas, has never been claimed as the Indo-European cradie-land by the racial theorists!

The new line of research opened up by Brandensteines is concerned chiefly with applied semasiology. He proceeds chiefly on the assumption that it is possible to draw definite conclusions about the cultural evolution of the primitive Indo-Europeans and their prehistoric seats of settlement from a study of the stocks of words they should have possessed at different stages, and also by examining the changes of meaning undergone by those words. Brandenstein shows first that Indo-Iranian reveals an older stage of semasiological evolution than that reflected in all the other Indo-European dialects put together, and from this he draws the reasonable conclusion that the Indo-Iranians were the earliest to separate from the main body of Indo-Europeans, and that the other tribes continued to live together for some time after their departure. Indo-European of the period previous to the secession of the Indo-Iranians he calls Early Indo-European and Indo-European of the period posterior to that secession, Late Indo-European. The Early Indo-European vocabulary, in Brandenstein's opinion, reveals a steppe-land at the foot of a mountain-range as the original home which, he thinks, can be no other than the north-western Kirghiz steppe to the south of the Urals. As for Early Indo-European flora, there cannot be found the name of a single plant that is typically European, and the fauna of this period comprised mammals like the elk, otter wild boar, wolf, fox, bear, etc,

The later Indo-European vocabulary, however, reveals quite a off words associated with dry steppe-land now crop up a number of words associated with dry steppe-land now crop up a number of vocables which clearly suggest swampy tracts, and now appears for the first time also the idea of bridges—suggesting settled residence; on the other hand, words denotative of fauna and flora of this period point to the territory immediately to the east of the Carpathians. Brandenstein therefore concludes that the undivided Indo-Europeans lived originally in what is now the Kirghiz steppe, from where the Indo-Irainan tribes moved eastward, and the other tribes, at a later date, westward. The westward-moving tribes, however, were split up into two groups by the Rokytno swamps, so that some of them struck north to be differentiated later into Nordics, and others advanced into Ukraine and from there farther to the south and the west

It would be senseless to claim that every detail of the itinerary of the Indo-European tribes chalked out by Brandenstein is, or can be, correct. But it is significant that the results obtained by him by applying his altogether new method should point to approximately the same locus as is indicated by the evidence of history, philo-

logy, and archaeology. Indo-European pre-history, as reconstructed by Nehring and Brandenstein, is by no means identical, but neither are the two mutually exclusive. The main difference is that Brandenstein takes as an interim home of the west Indo-European tribes practically that very region which in Nehring's view should have been the Indo-European cradie-land.

We shall now conclude tins chapter with a brief examination of the evidence of the non-Indo-European language-groups on the Aryan problem. Similarities between Indo-European and Finno-Ugrian language-groups are so strikings that they cannot be brushed aside as cases of mere fortutious coincidence; but on the other hand it would be conceding too much to them to postulate on their evidence an organic relation of distant common origin. The conclusion in any case is irresistible that Indo-European and Finno-Ugrian had influenced each other in very early times. The original seat of the Finno-Ugrians was, however, in Central Russia. And it is significant that from purely ethnographical consideration, too, Flore? came to the conclusion that "genetically considered, the Uralians are, in many cases, the zone of origin of numerous Indo-European cultural henomena."

Some such historical—not organic or genetic—relation between early Indo-European and early Semitic is hard to deny in face of the numerous striking points of similarity (if not identity) pointed out by Möller—similarity in the endings of nominative, accusative, and genitive singular, sin certain elements of dual and plural formation, and perhaps also in nominative and accusative singular, of the pronominal flexion. He even categorically declared that "the Semites did not radiate from Arabia as is assumed by most Semitists, but came to Arabia from a northern seat either through Asia Minor or over the Irānan plateau."

Möller's theory has indeed not been generally accepted by the scholarly world, but it is no longer possible to deny today that there must have been at least historical contact of some sort between Early Indo-European and Early Semitic. This is important, for if the primitive Indo-Europeans had on the one hand contact with the Finno-Ugrians of Central Russia and on the other with the Semites, then the region that naturally detaches itself as the probable Indo-European cradle-land is no doubt South Russia, specially as Indo-Finnic relations were decidedly more intimate.

The evidence of linguistic palaeontology need not be considered in detail, since Schrader did that with masterly thoroughness in his well-known works; 72 but it is important to remember that the region to which he assigned the Indo-European original home after his spech-making researches is also South Russia. The argument that has been most persistently levelled against Schrader is the so-called beech-argument; since the beech was known to the Indo-Europeans.

THE ARYAN PROBLEM

it is argued, their original home must have been "to the west of a line drawn from Königsberg in Prussia to the Crimea and continued thence through Asia Minor,"73 for the beech does not grow to the east of the line. But there is absolutely no certainty that the Indo-European word *bhāgos, from which the English word "beech" is very probably derived, also signified the thing designated by this English word "beech." Moreover, the word for "beech" seems to have been confined only to the western Indo-Europeans, for there is no trace of it in any eastern dialect if the late Kurdish word buz74 is left out of consideration. In spite of the enormous increase in knowledge since the days of Schrader it would be best, therefore. to adhere to his conclusion that South Russia, more than any other region, can claim to be regarded as the cradle-land of the Arvans (== Indo-Europeans).

1 Collected Works, New Impression, 1898, Vol X (The Home of the Aryas), p. 90. 2 Origines Aricae, 1883, p 6.

- 2 Origines Arroce, 1883, p. 6.
 See Plato's Cretyfus and Christ's Geschichte der Griechtschen Lifterutur, funts Auflage von Withelm Schmid, erster 761, Munchen 1969, p. 533.
 Herrichte Auflage von Withelm Schmid, erster 761, Munchen 1969, p. 533.
 Herrichte Auflage von Withelm Schmid, erster 761, Munchen 1969, p. 533.
 Herrichte Auflage von Herrichte Geschieder Gesch
- 5 Given up in Europe since it was discovered that Sanskrit does not give the truest picture of the original Indo-European.
 6 In this chapter the word "Aryan" has been used in the sense of "Indo-
- European"
 7 For Mohenjo-daro of Ch. IX.
- 8 Ch IX, p. 197.
- 8 Ch IX, p. 197.
 9 In the oldest ritual texts every care is taken not to mention directly the name of this terrible god. He is indirectly referred to as "this god" or "the god whose name contains the word bhids or posis" (e., Bhidsadt, Fadupatl). The name occurring in a Rigredic verse (II, 3 I) was purposely pronounced as Rudrigs (At Br. III, 3 > 10)? From the curious remarks made in At, Br. III, 3 10 it also appears that the reading of RV, II, 3 Is was originally oblis of the place of servicine Arbman in his dissortation on Rudra, (Uppsala, 1929) and the proceeding the control of the Rigredic age than the Rigredic and the Rigredic age than the Rigredic and the Rigredic age than the control of the Rigredic age than the Rigredic and the Rigredic as the statistical control of the Rigredic age than the control of the Rigredic and the statistical control of the Rigredic as the statistical control of the Rig
- Rivereda itself

 O. See Keith, RPVU, HOS., Vol. 31, p. 145. Precisely the same was the attitude
 of the Greeks towards their apotropaele foreign goddess Hekate (see Nilsson,
 Greek Religion, p. 204).

 11. See Jane Ellen Harrison, Prolegomena to the Study of Greek Religion, second
 edition, pp. 8 ff

 12. CI, Ch IX, pp. 191, 196 ff

 13. Thus date of the Gdibbs and bein author. Zarathustra has been maintained—

- against indigenous Iranian tradition-by Ed. Meyer who declared it to be one against indigenous Irānian tradition—by Ed. Meyer who declared it to be one of the incomprehensible things in history that snyone should consider Zarathustra's patron Vistaspa to have been the same person as the father of Darius I. So also Bartholome, Zarathustra Leben und Lehre, pp. 10-11. For full literature on this point up to 1932 see Die Immer in Kulturgeschichte der Alten Crents (Arthur Christensen), p. 213.

 14. Walther Witst who in recent times has tried most to push back the age of the Kiyerde antitis nevertheless that the Mohenjo-daro culture is not Indo-Riversch antitis nevertheless that the Mohenjo-daro culture is not Indo-WZKM, XXXIV, pp. 212, 189). Cf. the views of Dr. S. K. Chatterji in Ch. VIII. 1869.
- VIII. p. 160 ff.

See Jenson. SPAW. 1819, pp. 387 ff., Forrer, ZDMG; 1922; pp. 254 ff., CHI,
 L. 2. CAH, H. 13.
 See Arthur Christensen, op cit., p 209, fn. 8.
 See Arthur Christensen, op cit., p 209, fn. 8.
 T. 3. G., Sk. Inder but Hit. In-te-re, Skt. Versuas but Hit. U-ru-osn-a. These geds were worshipped not by the indigenous Mitsmi people who were non-inde-Zuropean in speech, but by them Aryan rulers known as Morpeani. The

- Indo-European in speech, but by their Aryan rulers known as Maryanai. The word maryanis may be connected with Rigwedic marya.

 13. Vol. II, p. 13.

 13. See near chapter.

 13. Vol. II, p. 13.

 15. See near chapter.

 15. These names have been fully discussed by Mironov in Acta Orientalia, Vol. XI, pp. 140 ff. For a helpful criticasm of Mironov's equations and etymologies see Keith, Woolser Comm. Vol. pp. 137 ff.

 25. See Educad Meyer, op. Ct., Vol. I, § 458.

 26. Die Proposition of the Comm. Vol. pp. 137 ff.

 27. Gearbicke des Altertume, II, I, second edition, 1928, p. 25.

 28. The same view has been expressed much more emphabeally also by Herzfeld (op. cft, pp. 181-2) only with this difference—which is perhaps a necessary was situated in Russian Turkestlast the original indo-Liranian common home sativated in Russian Turkestlast the original Lobo-Liranian common home at the contract of the contract of the contract of the Common Common home at the contract of the Common Common home and the contract of the Common Common home at the contract of the Common Common home at the Common America home at t
- 27. To admit that Vedic culture began about 1500 B.C does not of course mean that the Rigweici language as known to us is to be dated so early On the contrary is suggests that the Rigweici language as smown to us is to be dated so early On the contrary is suggests that the Rigweici language assumed its present form at a considerably later period, probably about 1000 B C, as suggested above on the contrary is considerably later period, probably about 1000 B C, as suggested above on linguistic grounds.
- 28. For the first time in SBA, 1908, pp 14 ff, then again in KZ 1909, pp. I ff, and often later, Freiherr von Eickstedt, as quoted by Nehring in his Studien zur indogermanischen Kultur und Urheimat, p 227. considers Kazakstan to have been the common home of the Indo-Irānians, but he does not seem to have taken into consideration the possibility of a back-surge of the eastern Indo-

Entropeans
20 JRAS, 1998, pp. 1085 ff.
30 Modi Memorial Volume, 1930, pp. 81 ff. Some scholars have expressed the view that the Aryans of Mitanni were Indians pure and simple, cf. Jacobi, JRAS, 1919, pp. 121 ff., Jensen, SBA, 1919, pp. 467 ff., Sturtevant, Yale Classical

JRAS, 1919. pp. 721 ff., Jensen, SBA, 1919, pp. 491 H., Deutwern, Ame Consensational Programmer, pp. 215 ff.

31. See Ebert's Reallesikon der Vorgeschichte, Vol I, 1924, p. 137. But Friedrich has adopted a non-committal attitude in this regard in his article "Das erste Auftreten der Indogermanen" in Hirt-Festschrift, Vol II.

32. Hirt-Festschrift, Vol II. pp. 31.

33. See my article in IC, XI, pp. 147-69, particularly pp 155-6; of also Johannes Friedrich, Geschichte der Indogermanischen Sprachussenschaft, III. 5, p. 42. Nehring's speculations about the Luvanse (Studien zur Indogermanischen Victoria and Tribescant in Vil zer und vollen in der Studien zur Indogermanischen Villes und Tribescant in Vil zer und vollen in der Studien zur Indogermanischen Villes und Tribescant in Vil zer und vollende, has seerlichten dat in der Villes und Vil Nehring's speculations about the Luvisine (Studies zur insogermanischen Rüther und Urbeimat, p. 37 are inconclusive, his assertion that the earliest culture of Troy (c. 3000 B C) was certainly indo-European (loc. ct.) seems to be an unproved assumption mare of the Hittite Language, p. 29.

35. Kulturgeachichte des Alten Orients, dritter Abschnitt, erste Lieferung, 1933,

- p. 78

 8. Schachermeyr, too, admits that the Hittites probably entered Asia Minor about 2000 B.C. (Hitt-Feaschrift, Vol. I, p. 224)

 37. Kulturgeschichte des Alten Orients drifter Abschnitt, erste Lieferung, p. 48.

38 Schachermeyr, Hvrt-Festschrift, Vol I, p 235.

Schachermoyr, Hrr-Fesschrift, Vol. I, p. 235.
 Reich und Kultur der Cheiter, p. 234.
 Bro a pretty complete aurey of the problems connected with Tocharian, see Tell, funiter Band, Leiferung and Commandation Symichotesenschaft, zweuter Tell, funiter Band, Leiferung 227-46.
 See Hirr-Festschrift, Vol. II, pp. 227-46.
 See Hirr-Festschrift, Vol. II, pp. 227-46.
 The split is caused by the difference in the treatment of certain k and g and the caused by the difference of the treatment of certain k and g and the caused by the difference of the treatment of certain k and g and the caused by the difference of the treatment of certain the caused by the difference of the treatment of certain k and g and the caused by the difference of the treatment of certain k and g and the caused by the difference of the treatment of certain the caused by the difference of the caused by the diffe

44. The theories associated with the names of Schleicher and Schmidt will be found

44. The uncores services with the names of polarical and bounds with the name scale has been explained in many text-books and need not be discussed here.

45. So also Hirt. Die Indopermanse, Vol I. p. 125. Niederle most emphatically asserts that the Lithuanians are still luving in their original home on the Baltic (Manuel de l' Antiquité Slace, Tome I: Historia, p 13).

THE ARYAN PROBLEM

- 46 Op cit, p. 121.
- 47. Bronze Age Greece, p. 288.
- 48. Op cit., p. 249 Some scholars, however, still maintain that the Mycenaeans were identical with the Achaians and therefore spoke Greek
- were nominess with the Achaians and inerctore spoke (steek
 § It is important to remember that the Akaivasha (a-Achaians²) are mentioned
 for the first time in 1228 B C for the Egyptian records, and the Danauma
 (=Hom. Danaisans²) in 1128 B C (see Gordon Childe, The Arysan, pp. 728-73).
 Melliet seems to have considered the Akcitosaha of the Egyptians, the Abhlayav
 of the Hittle texts, the Achai(v) of thomer and the Achtor of the Latina
 for have been one and the same people (Aperus d'use Histoire de la Lauge
 Grecoux, third edition, 1290, p. 57). Cf. also Solwyzar, Griechache Grammatik. Vol I, p 46
- 50. Practically all that can be said in favour of a Germanic home will be found in the two volumes of the Hirt-Festschrift, Heidelberg, 1936.
- 51 Origines Aracae, p 5.
- 31 Originez Articet, p. 3. St. it is curious to note that both Penka (Op. cit, p. 58) and Tilak (see his Arctic Home in the Vedas), independently of each other, arrived at the conclusion that the original home of the Aryans was situated in the polar region. Penka depended on the evidence of Odyssey X, 81-6, where short nights are spoon. of In the Vedic literature there are indeed passages which may suggest that the Vedic Aryans actually knew of the never-setting polar sun. For instance, Astareya Brahmana, III 4 6. sava esha na kadachana 'stam eti no 'deti. etc. But it is quite clear that the author of the Astareya Brahmana is here only speaking of an astronomical discovery-remarkable for the ace-that the sun
- actually does not "rise" or "set" 53 The racists apart, whose chief preoccupation is to try to prove that the Indo-Europeans were of Nordic stock.
- 54 Much, Die Heimat der Indogermanen im Lichte der urgeschichtlichen Forschung, second edition, 1904
- 55. Gordon Childe, Wiener Besträge Zur Kulturgeschichte und Linguistik, Jahrgang IV, Die Indogermanen und Germanenfrage, 1936, p 526
 56 Hirt-Festschrift. Vol I, pp 19, 24, 37 Rosenberg, Kulturströmungen in Europa
- zur Steinzeit, Kopenhagen, 1931, pp II ff 57 So Nehring, Studien zur indogermanischen Kultur und Urheimat, pp. 27, 59-61.
- 58 Ursprung der Germanen, p. 120.
- 59 Germanentum und Alteuropa, p. 166
 80. Substrattheorie und Urheimat der Indogeramanen. Mitteilungen der Anthropolo-
- gischen Gesellschaft, LXVI, 1936, pp 69-91 61. Quotation by Pittioni, Wiener Beitrage zur Kulturgeschichte und Linguistik, Jahrgang IV, 1936, p 531
- CHI, I, 66. 63. "Isogloss" means "a linguistic innovation common to two or more groups of the same family of languages
- 64. Mahābhāshya ad Pānıni II 2 6: gaurah suchyāchārah kapilah pingalakesa sty =enan=api abhyantaran brahmanye gunan kurvanti.
- 65 Die erste indogermanische Wanderung, Wien, 1936 Brandenstein's ingenious theory of an early Indo-European home in the Kirghiz steppe and a later Indo-European home in eastern Poland has not been accepted by Nehring (Studien zur indogermanischen Kultur und Urheimat, p 28, fn) who has promised (loc cit) to give his reasons for rejecting Brandenstein's theory in a future
- publication 66 Hirt, Die Indogermanen, Vol. I, p 72; Nehring, Studien zur indogermanischen Kultur und Urheimat, pp. 21-2
- 67. Hirt-Festschrift, Vol. I, p. 124.
- 68 KZ, Vol. XLII, pp. 175-9
- 69. Vergleichendes indogermanisch-semitisches Wörterbuch, pp. xiii f
- 70. See Albert Schott, Hirt-Festschrift, Vol. II, pp 93-4.
- 71. Vergleichendes indogermanisch-semitisches Worterbuch, p xvi.
- Sprachvergleichung und Urgeschichte, second edition, Jena 1890; Reallexikon der Indogermanischen Altertumskunde, second edition by Nehring in two vols, Berlin and Leipzig, 1917-1929
- 73. So Giles, CHI, I, 68. It is difficult to find a single positive argument in favour of Giles' Hungarian home theory.
- 74. According to Bartholomae (Indogermanische Forschungen, Vol. IX, p. 271) this Kurdish word may be connected with "beech."

APPENDIX1

The theory of the indigenous origin of the Aryans has been advocated by a number of scholars. MM. Ganganath Jha has tried to prove that the original home was the Brahmarshi-deśa.² D. S. Triveda suggests that the original home of the Aryans was in the region of the river Devikä in Multän.³ L. D. Kalla advocates the claims of Käshmir and the Himälayan region.⁴ The various arguments in favour of this view may be summed up as follows:

- There is no evidence to show that the Vedic Aryans were foreigners or that they migrated into India within traditional menory. Sufficient literary materials are available to indicate with some degree of certainty, that the Vedic Aryans themselves regarded Sapta-Sindhu as their original home (devakyita-yoni or devanimitadesa).
- Migrating races look back to the land of their origin for centuries. The Parsis in India remember their origin after eight hundred years. The ancient Egyptians and the Phoenicians remembered their respective lands of origin even though they had forgotten their location. The Vedic Aryans, if at all they came from outside, therefore, must have lived in Sapta-Sindhu so many centuries before the Vedic period that they had lost all memory of an original home ⁵
- 2. The linguistic affinities are not positive proofs of Aryan immigration. The Vedic Sanskrit has the largest number of vocables found in the Aryan languages. These are preserved in the languages of the Sanskritic family in different parts of India even when there has been inter-racial contact for centuries. On the other hand, if the pre-Vedic Aryan language was spoken in different parts of Europe and Asia where the Aryans had settled before coming to India, how is it that only a few vocables are left in the present-day speech of those parts, while the largest number of them is found in the distant places of ultimate settlement and racial admixture in India? On the contrary this disparity can easily be explained if the pre-Vedic was the language of the homeland of Aryans and the other Aryan languages came into existence as a result of the contact between migrating Aryans and non-Aryan elements outside India and Persia.
- 3. The Vedic literature is the earliest extant record of the Aryan mind. How is it that in the course of their journey to the Sapta-Sindhu the Aryans left no such record elsewhere? This absence of literary records in other countries cannot be explained away by a hypothesis that the Aryans only reached a high stage of cultural evolution in India. But we can satisfactorily explain it if we suppose that the Aryans migrated from India, and the migration being only of the superfluous population of roving tribes without great cultural development, they could not impart the literary and cultural tradition to the countries in which they ultimately settled?

THE ARYAN PROBLEM

- 4. The sacrificial rituals had long been established before the compliation of the Samhita. Therefore the home of Soma, the Mujavant or Munjavant hills in the north of the Punjab, indicates the locality from which the sacrificial rituals developed.
- 5. It is often argued that Lithuanian being the most archaic in the Aryan family of languages, Lithuania is likely to be the original home of the Aryans. But a language remains archaic even when the persons using it are unprogressive; or if they remain in a locality where no fusion is possible with races speaking other languages; or if they develop a highly refined technique for preserving and using archaic forms. The first two conditions are probably responsible for the archaic character of Lithuanian.9
- 6. It is argued that the tiger, a native of the Bengal swamps, is not mentioned in the Rigveda, but the place of honour is given to the lion. Similarly the elephant, mentioned as the mrigahastin, shows that it was a novelty.10 These arguments do not carry much weight in view of the fact that the Harappa civilization of the Indus Valley shows little trace of the lion (supposed to be common in the desert of Raiputana) but is fully conversant with the worship of the tiger and the elephant as indicated by the seals. If in about 3000 B.C. the elephant and the tiger were so well known in the Punjab, it is absurd to suppose that they disappeared so completely as not to be mentioned in the Rigueda in c 1500 BC. The word mriga-hastin is merely a poetic term and does not imply novelty. In the same way the word parvatagiri, used for a mountain in the same Rigveda, clearly does not mean that mountains were strange to the Vedic peoples. Again it is said that rice is not mentioned in the Rigueda. Even so, salt is never mentioned in the Rigueda. Can we conclude that the consumption of salt was unknown in the Rigyedic times? Rice seems to have been unknown in the Harappä civilization also. This only proves that yava (barley) and wheat were the staple cereals of North-West India.
- 7. The geographical data of the Riqueda, as analysed in Ch XIII. clearly show that the Punjab and the neighbouring regions constituted the home of the people who composed these hymns. There is no good ground for the belief that they or their ancestors lived in any other country.

^{1.} This Appendix is based on a long note on the subject prepared by Prof S лиз лурниот и в выес от в 100 поте оп the storect prevared by Prof S Srikanta Sister and most of the arytuments are advanced by Mr K. M Munshi in Glory that voz Gurjeradeia. I. Section II
 Acherus Peuhphörich (=D R. Bhandarkar Comm. Vol.), pp. 1-2.
 ABORI, XX. 48 ft.

POC, VI, 723-4.
 Munshi, op. cst., 46.

^{6,} Ibid., 81. 7. Ibid., 82 8. Cf. KHDS, II, Part I, pp 11-16

^{9.} Munshi, op. cit., 83.

^{10.} CHI, I, 81.

CHAPTER XI

INDO-IRÁNIAN RELATIONS

It has been shown in the preceding chapter that the undivided Indo-Iranians, as suggested by their already specifically characteterized Satem dialect, must have left their original Indo-European home after the Hittites and the proto-Tocharians, but before any other Indo-European tribe. After some wanderings they settled down in what may be called the Indo-Iranian original home which was situated in the Pamir region (Eduard Meyer) or more probably in the plains of the Oxus and Jaxartes (Ernst Herzfeld). The latter says: "From time immemorial, at least from the third millennium down to the middle of the second, the Arvans inhabited, as an undivided ethnical group, the vast plains of the Oxus and Jaxartes, the land Eranvej of the two rivers Vahvi-Dativa and Ranhä."1 It is also quite clear that the Aryan principalities appearing about 1400 B.C. in Mesopotamia and Syria were "the successful creation of a group of condottieri and their troops who had detached themselves from the main body, while the wandering tribes passed through eastern Iran towards India."2

The undivided Indo-Irānians must have passed a long time in their Central Asian common home, for here grew up a specific Indo-Irānian culture and religion that may be reconstructed, at least partially, by comparing the Veda with the Avesta. Before the occupation of the Irānian plateau by tribes from the Indo-Irānian original home, the high land, to all appearance, was the seat of a culture that was probably matriarchal, and the people worshipped snake-gods like the primitive non-Aryans of India. It is very probable, therefore, that the pre-Aryan cultures of North-West India and Irān were of the same spirit and origin.³

This old cultural link between pre-Aryan Irān and pre-Aryan India, instead of being strengthened as a result of the migration of the Aryans into these two countries, as could be normally expected, was to all appearance completely severed, for there is nothing to show that the Vedic Aryans of India maintained an active cultural relation with their brethren in Irān.

In the earliest days the Aryans of India must have been connected with the Aryans of Iran, either as friends or as foes, but "actual historical contact cannot be asserted with any degree of probability." The two peoples turned their backs upon each other as it were, and developed their distinctive civilizations apparently without the least mutual influence, although in language, culture and religion their similarity in the earliest period was little short of identity.

INDO-IRÂNIAN RELATIONS

When later in history, ounder the Achaemenids, Greeks, Bactrians, and Sakas, the Irānians and the Indians were forced to meet as citizens of the same empire, they met as complete strangers, not as cousins of the same family.

Geographical barriers are no doubt to some extent responsible for this apparent mutual oblivion, as also the fact that from the Indo-Iranian common home the pre-Indians and the pre-Iranians expanded in two almost opposite directions. All this, however, cannot explain the complete cessation of cultural contact between Iran and India even as early as the Rigvedic age. The Iranians had retained a distinct memory of the Indo-Iranian common home (Erānvēj) in their mythology, but the Indo-Arvans, who must have developed their distinctively Indian Rigvedic culture about 1500 B.C. at the latest, have nothing to say on this point. It is indeed difficult to get away from the idea that the silence maintained by the earliest Vedic Indians on Iran and the Iranians was at least partly intentional, for some of the geographical names prove beyond doubt that the period of immigration had not been so long as to have completely obliterated all memory of the land they left behind. Thus the names Rasa, Sarasvatī and Bāhlīka, not to speak of others, must have been brought to India from Iran by the Arvans and applied to two Indian rivers and one Indian province.7 The reticence maintained by the Vedic Arvans about immigration from Indo-Irania was, therefore, at least partly intentional, for otherwise it would seem that those parts of the Rigveda in which possible or probable Iranian names occur, were composed already in Iran, as Hillebrandt actually suggested.8

Incompatibility of some sort between the earliest Aryans of India and Iran has to be assumed to explain this camouflaged indifference, and it is also clear that this incompatibility was the cause of their divergent movements from their common home and ultimately destroyed the cultural unity between Iran and India of the pre-Aryan days. Seeds of such incompatibility which later developed into mutual hostility can be clearly seen already in the oldest Aryan religion and cult of these two countries. The primitive Indo-European religion recognized only nature-gods (sky, sun, wind, etc.) and a fire-cult.9 But already the undivided Indo-Iranians knew a soma-cult beside the older fire-cult, and abstract deities 10 beside the older nature-gods. Indo-Iranian society had therefore ceased to be culturally homogeneous even before the forefathers of the Indian and Iranian Aryans parted company, and it is hardly to be doubted that their parting was more the effect than the cause of the cultural contrast revealed in religion. The old Indo-European term *deivo (= Indo-Iranian *daiva) was apparently considered inappropriate for the new abstract and ethical deities, and a new term, Asura, perhaps borrowed from a higher civilization,11 came to be

used as their designation. Varuma was the chief of these ethical deities just as Indra was the chief of the older nature-gods. 12

The fact that about 1400 B.C., in the well-known treaty-record discovered at Boghaz-köi, the Daiva-gods Indra and Nāsatya appear side by side with the Asura-gods Varuna and Mitra, clearly suggests, as Christensen¹³ has pointed out, that the antagonism between the worshippers of the Daiva-gods and the Asura-gods—which is the central feature of early Indo-Irānian history—had not yet broken out. But it was in full blast long before the advent of Zarathustra whose Gāthās should be dated about 1000 B.C. on linguistic grounds, as shown in the preceding chapter.

The antagonism between the worshippers of the new gods and the old must have been one of the main causes of the estrangement and subsequent secession of those Aryans who later conquered India, but their antagonism was not confined to the field of religion alone. Christensen 14 has suggested that the Asura-religion was practised by the more cultured and steadier elements of the primitive Indo-Iranian society whose chief occupation was agriculture and cattlebreeding, while the older Daiva-religion continued to find favour with the more vigorous but less civilized portions of the people to whom the primitive predatory habits were more congenial; the former were content to remain behind in Iran, but the latter, urged by the spirit of adventure, advanced farther east and at last entered India. But all of those who remained behind were not Asuraworshippers, nor all of those who braved the hardships of the forward march into India were adherents of the Daiva-religion. The Daiva-inscription of Xerxes, 15 discovered in 1935, clearly shows that even so late as the fifth century B.C. Dawa-worship had to be forcibly suppressed within the Achaemenian empire. And in India we meet with the curious situation that in the oldest period all the great gods received the title Asura as a decorative epithet, though later it came to be used exclusively as a term of abuse. In innumerable passages in the Brähmanas the Asuras have been represented as superior to the Devas in the arts of civilized life, and both in Vedic16 and Puranic tradition they are regarded as the elder brothers of the gods. They are as far above the Dasas and Rakshasas as the Devas themselves.

All things considered, it seems difficult to deny that along with the great horde of Daiva-worshipping Aryans came to India also a culturally superior strong minority of Asura-worshippers, whose cult and religion was slightly different from that of the former and who were for that reason ceaselessly cursed and condemned by the Vedic Aryans, more out of jealousy, it would seem, than out of contempt. For if the Vedic Aryans intentionally suppressed all reminiscence of the Indo-Irianian original home, as suggested above, would they not also have suppressed the memory of the Asura-

INDO-IRÂNIAN RELATIONS

worshippers in the same way if they could? But this they could not, because some Asura-worshippers were physically present among them.

The earliest Indo-Aryan society, too, like the earliest Indo-Iranian society, was therefore not quite homogeneous culturally. It was predominantly—but not exclusively—Davic, while the contemporary Iranian society was predominantly Asurc. After a period of conflict and adaptation there was peace which proved successful to the extent that even the foremost of the Dava-gods, namely Indra, not only came to be regarded as an Asura in the oldest parts of the Ryeveda, but was also credited with possessing māyā, which was a special property of the Asuras and probably signified "magical power." It is hardly an accident that in hindu mythology the architect of the gods is an Asura whose name is Maya: the rude Dava-worshippers apparently regarded the superior arts and crafts of their rivals as achieved by magic.

In spite of the Dawa-bias of the Indians and the Asura-bias of the Iranians their culture and religion continued to be essentially the same till the advent of Zarathustra in Iran. Zarathustra's position is more or less analogous to that of the Buddha in India and Orpheus in Greece, both of whom protested effectively against the ceremonial slaughter of animals in the name of religion, but not by far so vehemently as Zarathustra.16 In his Gathas Zarathustra condemns in bitter terms the orginstic festivities at which the Daivaworshippers, inebriated with Soma, offer bloody sacrifices to their gods, extinguishing amidst shouts of revelry the life of the innocent bull. 13 It is clear that the ritual practices against which Zarathustra directed his homilies closely resembled those of the Vedas. A large number of common cult-words such as haoma (= soma), zaotar (= hotā), athravan (= atharvan), manthra (= mantra), yazata (= yajata), yašna (= yajña), āzūitī (= āhūtī), etc., and also the whole sacrificial cult, leave no doubt that Vedic and Avestan ritual are of one and the same origin.20 Evidently, the Zarathustrian reform could not materially alter the essentially Vedic character of the Soma cult cherished in Iran from ages before his time.

In the field of religion and mythology, however, Zarathustra was more successful. But here, too, the points of similarity are striking enough to prove previous identity. The ceremony of Upanayana is practically the same in the Veda and the Avesta, and inboth the conventional number of gods is the same, namely thirty-three. Both in the Veda and the Avesta the picture of the gods is primarily that of an heroic Aryan warrior riding in a chariot drawn by powerful steeds. Like the Vedic gods those of the Avesta too hold up the sky to prevent its falling down, and imageworship is equally unknown in the Avesta and the Veda. Varuna, like his Avestan opposite number Ahura, assisted by Mitra (Avestan Mitthra), is the supreme guardian of moral law, and the concep-

tion of cosmic order is represented in both by the same abstract deny, the vedic tuta = Avesian Aša.21 Even the notorious discrepancy between the Vedic and Avestan Indra will disappear if the nistory of this god, as reconstructed by Benveniste and Renou.22 is kept in view. Their ingenious theory may be summarized as tonows: In the Indo-Iranian epoch there were two different gods. Indra23 and Vritrahan (vritra = resistance, vritrahan = resistancebreaker). Indra was nothing but a concrete personalization of mere physical prowess, known in the legends of most primitive civilizations, but he was too Daivic to suit the taste of the stern reformer Zarathustra who did not hesitate to send him to Hades. But the Lord Resistance-breaker, 1.e. Vrioragna, whose function it was to break the resistance put up by evil, continued his glorious career within the Iranian pantheon. Indra and Vritrahan were united in the same person only later in the Vedic age. In short, Vedic Indra is the Indo-Iranian Indra (mentioned at Boghaz-koi) plus Vritrahan, whereas Avestan Indra is the Indo-Iranian Indra minus Vritrahan. There is no discrepancy, therefore, between Vedic Indra and Avestan Indra if it is remembered that the history of Indra is in reality the history of two different gods who influenced each other in two different ways in Iran and India.

The Nasatyas who in the Boghaz-koi inscription are mentioned side by side with Indra and Varuna also appear in the Avesta, though as a demon²⁴ like Indra, and even the minor Vedic god Apām-napāt is represented in the Avesta by a god of the same name To the Vedic Gandharva corresponds the Avestan Gandarawa, and to the Vedic Krisanu the Avestan Karasani.2. In the Veda Yama, the son of Vivasvat, is the ruler of the dead, in the Avesta, Yima, the son of Vivanhant, is the ruler of paradise.26 Examples can be multiplied to show that in spite of the Zarathustran reform, the Iranian religion continued to be much the same as before. On the whole it seems that Zarathustra's reform was not so much a break with the past as a determined and partly successful effort to reassert the principles of the old Asura religion by ridding it of all Daivic contaminations.27 This is suggested pointedly by the curious fact that not content with consigning to Hades the prominent Daiva-gods like Indra, he changed the name also of the chief Asuragod Varuna into Ahura Mazdah.28 That Zarathustra dropped the name while retaining and raising to the highest honour the personality of this god is apparently because in the previous age-at the time of the Boghaz-köi tablets at any rate-he had lived in the corrupt company of the Daiva-god Indra. For a similar reason Zarathustra avoided the word Baga "god" of Indo-European origin, though it occurs in the pre-Zarathustrian parts of the Avesta and in the Old Persian inscriptions,29 for an Indo-European word of religious connotation could not but have Daivic associations.

INDO-IRĀNIAN RELATIONS

So long as it was believed that the Gathas, because oldest in language, give also the oldest picture of the Aryan civilization of Iran, it was by no means possible to see that the society described in the Veda and the Avesta is essentially the same. But it has now been fully established that the civilization of the Gathas is a later reformed civilization of Iran, of which a much older phase is reflected in the Yasts, particularly the so-called heathenish Yasts, i.e. the Yasts which have suffered least from Zarathustrian revision.30 And the culture reflected in these pre-Zarathustrian heathenish Yašts is essentially that of Vedic India. The very Haoma-cult, which is rightly regarded as the chief indicator of Indo-Iranian cultural unity, is not only pre-Zarathustrian but definitely anti-Zarathustrian, and could be retained in the post-Zarathustrian religion of Iran only because the prophet-clearly out of policy-did not specifically mention Soma in prohibiting intoxicating drinks from this omission it was argued by Avestan theologians that all other intoxicants are impure, but not Haoma.31 Benveniste has demonstrated that the Persian religion of the Achaemenian age, as described by Herodotus, agrees not at all well with that of the Gathas, but shows significant points of similarity with the Vedic religion. 32

The notorious difference in burial customs between Iran and India entirely vanishes on scrutiny. The custom of exposing dead bodies in dakmas, which is unknown in India, was not of Persian origin, but a Median custom confined to the Magi. It became the customary funeral rite of Iran only in the Arsacidan age, and is mentioned for the first time in the Videvdät, a product of the Arsacidan period. The Achaemenian monarchs, whose Zarathustrianism cannot be seriously doubted, were placed in elaborate grave-chambers after death, and it is nowhere recorded that the corpse of any one of those mighty emperors had been thrown to birds and beasts.33

The ancient Arvan culture of Iran was thus hardly distinguishable from the ancient Arvan culture of India And that is as it should be, for both were derived from one and the same Indo-Iranian culture

¹ Iran in the Ancient East, 1941, p 190

^{2.} Op. cit., p 192

³ Op cit., pp. II, 177. 4 Ved Ind., I, p 505 5 Linguistic affinity between the earliest Aryans of India and Irán has been dis-

⁵ Linguistic affinity between the earliest Aryans of India and Irân has been discussed by the present writer in Linguistic Introduction to Sanskert, pp. 28-47 and IC, VII, pp. 343-59
6. For the history of later Indo-Irânian relations see CHI, I, pp. 323 ff
7. See Vedde Indez under these three names Zimmer was even of opinion that Vedic Rask directly refers to Irânian Rankia, te, Jazartes (AL, p. 16)
8. Ved. Myth., first ed., Vol I, pp. 98 ff; Vol III, pp. 372-8. Older attempts to read Irânian history and geography in the Veda have been bursefly dealt with by Jackson in CHI, Vol I, pp. 322 ff, and more recently by Ketih in Woobser Comm. Vol. (1969). Pytamea in Greece, Vestal fire of Rome, Gärhspatya fire of India (Ketik, RPVU, II, pp. 625-6)

- Like Vedic Rata = Av. Aša (to be pronounced erra, from arta).
 As I have suggested elsewhere (IC, VII, p. 339, this term is probably nothing but the personal designation of the tutelary deity of Assyria used as a generic
- but the personal designation of the tutelary deity of Assyria used as a generic name by the Indo-Frainian who must have come in direct or indirect contact with the Assyrians during the person of Kassite ascendancy, for the Kassite on the one hand borrowed from the Indo-Indiana the word sirps and on the 12. Varupa was originally a nature-god no doubt, since the equation Skt. Varupa Cr. Oursone has to be accepted (see Keth, IC, III, p. 421). Yet the natural basis of this god had been usurped by Dysaus pitá = Zeus potér already in Indo-European times, and as a result he became a pronounced ethical god. Varupa's associate Mitra, too, was originally a nature-deity—a sun-god—as I have been usurped by Dysaus pitá = Zeus potér already in Indo-European times, and as a result he became a pronounced ethical god. Varupa's associate Mitra, too, was originally a nature-deity—a sun-god—as I has is to the roop powerful Súrva. Pol., but he too had to lose his natural has is to the roop powerful Súrva. Pol., but he too had to lose his natural has is to the roop powerful Súrva.
- basis to the more powerful Surya.

 13 Kulturgeschichte des Alten Orients, p 211.

- Austrogenorice as Auto. Orema, p. 21.
 Austrogenorice as Auto. Orema, pp. 148-56
 See Statuma Sen. Old Persan Inscriptions, pp. 148-56
 See Keith, RPUU. II, p. 457.
 See Keith, RPUU. III, p. 457.
 See Keith, III, pp. 61-62. Benveniste has shown that the conception of Máys, by means of which Indra and his Iranian opposite number Vijéragna could assume different forms at will, dates from the Indo-Iranian epoch (Virtue Vijéragna, Could assume different forms at will, dates from the Indo-Iranian epoch (Virtue Vijéragna, Could assume the Could
- pp. 32 ft, 184).

 18. Irianun tradition would make Zarathustra more or less a contemporary of Buddha and Orpheus (if, as is generally thought, they were historical persons), but according to Eduard Meyer (Geschichte des Altertums, second edition, third volume, p. 110, fn. 3) at is an mexplicable thing that anybody should think so. That Eduard Meyer was right can be hardly doubled, although weighty opinions have been raised against his view. The mention by Assurbanipal about 700 B.C. awe been raised against his view. The mention by Assurbanipal about 700 B.C. of Assars Macada along with seven good argies and seven had print as a clear of the control of the CHI, I.p. 78). It is impossible therefore to suggest that the Kavi Vidiapa mentioned in the Avesta as the patron of the prophet was no other than the father of Darkus I (522-486 B.C.), for in that case the Zarathustram paintheon could not have been known in Assyra in the days of Assurbanipal antheon could not have been known in Assyra in the days of Assurbanipal.
- 19. See Christensen, op. cat., p. 220. 20 See Hillebrandt, Rituallitteratur, § 2.
- 21. See footnote 10.

- See manufacturin, Yan, v. 3.
 Lexpressed a different view in IC, VII, p. 338
 Darmesteler has apily said that Ahura Mazdih is no more different from Varuna than Zeus is from Jupiter (38E, IV, p. 10).
 See Herzfeld, Alipernache Inschrijten, p. 106.
 See Christenpen, Op. et. pp. 214 ft.

- Op. ctt, p 229
 The Persian Religion, Ratanbai Katrak Lectures, Paris 1929, pp. 32 ff.
- 33. See Herzfeld, Iran in the Ancient East, 1941, pp. 216-17.

CHAPTER XII

VEDIC LITERATURE-GENERAL VIEW

Our knowledge of the Indo-Aryans is based on the evidence of Vedic literature, of which the chief constituents are the four collections known as the Rigveda, Samaveda, Yajurveda, and Atharvaveda. Not a single work of the Vedic period can be accurately dated. On linguistic grounds the language of the Riggeda, the oldest Veda, may be said to be of about 1000 B C,1 but its contents may be-and certainly are in the oldest parts-of much more ancient date, and its latest parts, resembling Atharvanic charms, are as surely of much later origin. This Rigueda is neither an historical nor an heroic poem, but mainly a collection (samhitā) of hymns by a number of priestly families, recited or chanted by them with appropriate solemnity at sacrifices to the gods. Naturally it is poor in historical data. The Samaveda hardly counts at all as an independent text (see below). The Samhitas of the Yajurveda, if the Brahmana portions of the schools of the Black Yajurveda are left out of account, are nothing but collections of short magic spells used by a certain class of priests at the sacrifices. For the history of the Indian people of the Vedic age the Atharvaveda is certainly the most important and interesting of the four Samhitas, describing, as it does, the popular beliefs and superstitions of the humble folk, as yet only partly subjugated by Brahmanism.

Next to the Sanhitās are the Brāhmaṇas, an and desert of puerile speculations on ritual ceremonies. They mark the lowest ebb of Vedic culture. The Upanishads were at least partially the result of a popular protest against the soulless ritualism of the Brāhmaṇas, as was also the rise of socts like the Vaishṇavas, Jamas, Buddhists, etc. In the Sūtras Brahmanical orthodoxy fought and lost its last battle against these forces of religious liberalism beforo merging itself in the synthetic national religion of India in the pre-Muhammadan era, i.e. Hinduism. A brief survey of the Samhitas. Brāmaṇas, and the Śrauta-sūtras' is given here to indicate the nature and extent of these toxts, reserving for later chapters their linguistic and literary valuation

I. THE SAMHITAS

I. Rigveda

Of the various recensions of the Rigneda known in tradition only one, namely the Sākala recension, consisting of 1,017 hymns of very unequal length, has come down to us apparently complete, and it is this Sākala recension that is meant when one speaks of the

"Rigueda," though we have parts of two other recensions of the Rigueda, namely the Välakhilya (11 hymns, usually placed in the middle of the eighth Mandala of the Sakala recension) and the Bashkala (36 hymns in the Aundh edition of the Rigveda, the so-called Khila-sūktas, most of which are evidently spurious fabrications, inserted at various places in the Sakala text). Why fragmentsand only these fragments-of the Vālakhilva and Bāshkala recensions have been handed down to us is quite clear; they had definite, though minor, rôles to play in the ritual (as proved by later ritual texts in the case of some of them), and therefore had to be preserved 2 Originally the ritual varied not only from school to school but also from family to family.2a but later in the Rigvedic age a system of ritual with minor variations, generally recognized by all the principal schools and priestly families, had been built up, for which the texts collected in the Sakala school were accepted en bloc, but in which there always remained not a few loop-holes provided by the continually expanding ritual, and these loop-holes had to be stopped with Rik-mantras drawn sometimes from other recensions

Now, if the existing fragments of the non-Sākala recensions of the Rik-Sāmhitā owe their survival apparently only to the fact that they were utilized in ritual by priests of the Sākala school'—and indeed no other plausible reason can be suggested for the anomalous survival of these non-Sākala Rik-texts—then the important question arises should not the preservation of the whole Sākala recension itself be attributed to the same cause? This question has doubtless to be answered in the affirmative All the hymns accepted into the Sāmhitā must have possessed intrinsic ritual significance at the time of their acceptance.

Later, however, the ritual changed, and not a few of the hymns of the Samhitā in consequence lost their proper viniyoga, but not their position in the Samhitā which had become sacrosanct and therefore unassailable 44

The Rigreda is not—as it is often represented to be—a book of folk poetry; nor does it mark the beginning of a literary tradition Bucolic, heroic, and lyrical elements are not entirely absent, but they are sub-merged under a stupendous mass of dry and stereo-typed hymnology dating back to the Indo-Irânian era, and held as a close preserve by a number of priestly families whose sole object in cherishing those hymns was to utilize them in their sacrificial cult. Of natural outpourings of heart there is not much to be found in the Rigreda, for the hymns were part of an elaborate ritual which gradually came to be regarded as capable not only of persuading but also of compelling the gods to do the bidding of the officiating priests. This magico-religious attitude of mind found

VEDIC LITERATURE-GENERAL VIEW

fullest expression later in the Mimāmsā-philosophy in which the gods were retained only in name and the ritual itself came to occupy the place of the gods.

One hymm of three verses and three verses of three other hymns have not been divided in the Padapātha by Sākalya, who must have been dead when Yāska wrote and therefore lived before 600 B.C. This is important, for it shows that hymns and verses could have been added to the Rik-Sadhitā even after the date of Sākalya, for it is clear that Sākalya would not have left the hymn and the verses in question undivided if they had formed an integral part of the Samhitā in his time The formation of the Rik-Samhitā, as we know it today, had therefore not been quite complete even so late as the time of Sākalya. On the other hand, there is nothing to tell us when the task of collecting the hymns into a Sāmbitā was started

Most of the hymns were not composed as such, but were mechanically manufactured out of fragments of a floating anonymous literature. I and the process of manufacturing hymns in this manner must have continued for a long time. The fact that there are Mantras cited by Pratikas in the Brahmanas of the Rangela which do not occur in our Samhitā clearly shows that at the time of these Brāhmanas recently adopted or freshly manufactured Rik-verses were considered good enough for utilization in ritual, but were yet denied a place in the Samhita.8 It is impossible to imagine, however, any stage in the development of the Rik-Samhitä at which a demand for new Mantras was not present, for the ritual in which they were intended to be used was all the time growing in complexity and expanding in range-and therefore demanding new Mantras at every step.82 There is indeed much to be said in favour of a ritual tradition advocated by Hillebrandt9-which in his opinion was independent of the literary tradition of the Rik-Samhitā known to us, and which contained hymns all of which need not have been included in the latter.10

There is at all events no doubt that the texts constituting the Puroruchas, Nividas, and Praishas for the ritual are of pre-Sanhitā date, and that the Prailga-sūktas, Aprī-sūktas, etc., were composed directly with an eye to application in ritual. 11 All things considered, it seems best to conclude that the hymns constituting the Rub-Samhitā, though certainly not always composed or manufactured directly for the sacrificial ritual, yet owe their inclusion in the Samhitā, which guaranteed their preservation, wholly to the fact that some time or other the ritual offered a place to each of them.

The division of the whole Sanhitā into ten Mandalas, and the moment and arrangement of hymns in these Mandalas, are not at all arbitrary. It is hardly an accident that the number of hymns contain-

ed in the first and the last Mandalas is exactly the same, namely one hundred and ninety-one. The kernel of the Rik-Samhita is, however, constituted by the so-called family-Mandalas, i.e. the six consecutive Mandalas from the second to the seventh, each of which is supposed to have been composed by a particular family of priests. The hymns of these family-Mandalas are often composed of tristichs (trichas)-evidently because in ritual, as a rule, groups of three verses, and not whole hymns or single verses, are used. The eighth Mandala is known as the Pragatha-mandala, for the verses in mixed metres known as Pragathas, indispensable for the Udgatri-ritual, are drawn mostly from this Mandala. The ninth is most pronouncedly a ritual Mandala, for in it were collected all the hymns addressed to Soma Pavamana,12 which were originally included in the other Mandalas. The first Mandala falls naturally into two parts: the first fifty hymns have the Kanyas as authors like the eighth Mandala and are arranged according to principles obtaining in that Mandala (see below), but the rest are arranged in the manner of the hymns of the family-Mandalas. The tenth Mandala is manifestly a later addition, often Atharvanic in character-vet not so late that the few Pavamana-hymns originally belonging to it could not be transferred to the ninth Mandala.13

The principle governing the original arrangement of hymns in the family-Mandalas seems to have been determined by three considerations-deity, metre, and the number of verses contained in the hymns concerned 14 Each family-Mandala opens with a group of hymns dedicated to Agni, immediately followed by another group addressed to Indra. '5 Then follow in each family-Mandala groups of hymns dedicated to various gods, the relative positions of these groups being determined on the whole in the descending order according to the number of hymns contained in each, or, when such groups contain each an equal number of hymns, in the descending order according to the number of verses contained in the first hymn of each group. It follows as a necessary corollary to this rule that if in a family-Mandala several deities have as their shares only one hymn each, then these single hymns should be put at the end of the Mandala and arranged in descending order according to the number of verses contained in each Within each deity-group the order of hymns is determined chiefly by metre, again in the descending order, the hymns in Jagati coming first and those in Gayatri coming last These are in brief the laws governing the arrangement of hymns in the family-Mandalas-laws re-discovered in our age by Bergaigne and endorsed by Oldenberg. 16 These laws cannot, of course, be rigorously applied to the text of the Rigorda as we find it today. Yet, when a re-division of the hymns is made on the plausible grounds suggested by Bergaigne and Oldenberg, it is found that exceptions to these laws are surprisingly few. And it

VEDIC LITERATURE-GENERAL VIEW

leaves no doubt that the redactors of the family-Mandalas had in mind a comprehensive plan—the advantages of such a plan are obvious—according to which every single hymn in this large collection could occupy only one particular position and no other.

The plan of the eighth Mandala is altogether different. Here the hymns are not arranged primarily according to the deities invoked in them as in the family-Mandalas.17 The principle followed seems rather to have been primarily to group together all the hymns of each individual author, and then to arrange the hymns of each such group into sub-groups of hymns addressed to particular deities, and that in such a manner that the verse-numbers of the first hymns of these sub-groups would be in a descending order This peculiarity of the eighth Mandala, together with the fact that most of the hymns in Pragatha metres are found in it, does suggest-but by no means proves-that the eighth Mandala was subjoined at a later date to the kernel constituted by the family-Mandalas. 17a But there is positive reason to believe that there was a time when the eighth Mandala was actually considered to be the last in the Samhita, for why else should the Valakhilya-hymns be thrust into the eighth Mandala and not added after the tenth? Also the simple fact that the cighth Mandala is followed by the ninth strongly suggests the same thing, for since the latter consists almost exclusively of Pavamanahymns combed out of the other Mandalas, it could have been constituted as a separate collection only after them, and consequently after the eighth Mandala also It should not be forgotten, however, that the ninth Mandala is of a comparatively later date only as a separate collection, but not in contents Why it was considered necessary to assemble in a separate collection only the hymns addressed to Soma Payamana and no other deity is perfectly clear, for while the hymns addressed to other deities were primarily the concern of the Hotripriests, those invoking Soma Pavamāna were originally meant exclusively for the Udgatri-priests-who therefore should have taken the initiative in collecting the Pavamana-hymns in a separate book 1rd And since the Udgatri-priests were Saman-singers and not simply Mantra-reciters like the Hotri-priests, it is not to be wondered at if the hymns contained in the Udgatri-Mandala are arranged, as they actually are, according to metres, the chief concern of the redactors of this Mandala having been apparently to group together hymns composed in the same metre.

From the above survey it will be clear that all attempts to establish a reletive chronology of the first nine Mandalas of the Rigueda cannot but be futile. 19 That the tenth Mandala is later in origin than the first nine is, however, perfectly certain from the evidence of the Risaminia, including the tenth Mandala, had assumed practice of the Risaminia, including the tenth Mandala, had assumed prac-

tically the same form in which we find it today already before the other Samhitäs came into existence.²¹

2. Sāmaneda

As regards the Sāmaveda²² it is necessary always to keep in mind that the word sāman means "melody," and that the Sāma-Samhītā is nothing but a collection of melodies. Certain texts are, of course, included in what is known as Sāmāveda, but the rôle of these texts in the Sāmaveda is altogether secondary—in fact analogous to the part played by musical notes in music. The texts used as musical notes in this Veda are moreover almost wholly drawn from the Rīk-Sāmhītā. According to the figures given in the Aundh edition of the Sāmāveda, of the 1,603 verses (not counting the repetitions) of this Veda only 99 (again not counting the repetitions) are not found in the Rīk-Sāmhītā.²³ The literary and historical value of the Sāmaveda is, therefore, practically nil, though its importance for the Soma-ritual cannot be overestimated.

The text part of the Samaveda serving merely the purpose of musical notes, every melody could theoretically be chanted on every verse. Yet this freedom seems never to have been actually taken in the ritual. Rather the ritual demands that particular melodies should be chanted on particular verses It is the double task of assigning particular melodies to particular verses and particular verses to particular melodies that has rendered so complex the Sāmaveda which is, needless to say, a purely ritual Samhitā. The complexity of the whole system has become still more enhanced on account of the fact that, on the one hand, the same saman can be chanted on different verses, and on the other, different samans can be chanted on the same verse. In the language of the ritual texts, the verse on which a saman is chanted is called a Yoni, "source" This suggestive term, used already in the Brāhmanas, clearly shows that it had become conventional in ancient India to regard the verse as the source of the melody.24 even though of text and melody one can never be the source of the other. The Samaveda proper, i.e. the Archika, is nothing but a collection of 585 Yonis. The Purvārchika, together with the Āranyaka-Samhitā and the Uttarārchika, represents the text-part of the Samaveda. The Gramagevagana, the Aranyagevagana, the Chagana and the Chyagana25 together constitute its song-part.

The Pürvärchika records only verses (Yonis) to each of which corresponds a single sāman (melody) named after the seer who is supposed to have discovered it, and these sāmans corresponding to the verses of the Pürvärchika are registered in the Grāmage-yagāna and the Aramyageyagāna. The Yonis of the Pürvärchika are divided into three parts: Nos. 1-114 are verses addressed to Agni; Nos. 115-466 to Indra; and Nos. 467-685 to Soma Pavamāna.

VEDIC LITERATURE-GENERAL VIEW

The Uttararchika, on the other hand, records mostly tristichs (trichas) or distichs (pragathas)26 occasionally also complexes of more verses, but never single verses as in the Pürvarchika. Now, generally the first verse of a Tricha of the Uttararchika is found to occur among the single verses (Yonis) of the Pürvärchika,27 and when such is the case it is to be understood that the melody belonging to that particular Yoni of the Pürvärchika has to be chanted on the whole of the corresponding Tricha of the Uttararchika. In actual chant, however, no verse can retain its original form. Therefore it is not sufficient merely to indicate which verse has to be chanted in which melody. It is necessary further to indicate what modifications a verse will have to undergo when chanted in a particular melody To indicate the actual forms assumed in chant by the tristichs of the Uttararchika is the purpose of the Uhagāna, which thus gives the melodies of the Grāmagevagāna in their final ritual form The Uhyagana does the same for the melodies of the Aranyagevagana 2H

3. Yajurveda

The Yojuvveda is, if possible, even more pronouncedly a ritual Veda, for it is essentially a guide-book²⁰ for the Adhvaryu-priests who had to do practically everything in the sacrifices excepting recting the Mantras and chanting the melodies ³⁰ And since variation is more natural in manual work than in recitation and chanting, we actually possess today—not merely in tradition as is mostly the case with the other Sainhitäs—no less than six complete recensions of the Yajurveda, of which two (Mādhyandina and Kāṇva)^{30a} constitute the White Yajurveda, and the rest (Taittirya, Kāṭhaka. Maitrāyanī and Kapishhala) the Black Yajurveda ³¹

The fact that the Gopatha-Brāhmana (I. 29) in citing the first words of the different Vedas quotes in the case of the Yajurveda the beginning of the Vājasaneyi-Samhit732 may suggest that the White Yajurveda represents the original tradition of which the Black Yajurveda with all its recensions is a later variation the truth should rather be just the opposite, for it is hardly possible that Mantra and Brähmana, kept separate as in the White Yajurveds tradition, should have got mixed up at a later date. It is generally assumed, therefore, that the Black Yajurveda, with Mantra and Brahmana mixed up throughout, is older than the White Yajurveda in which the Brahmana was separated from the Samhita. perhaps in imitation of the Rigvedic model In the Taittiriya-Brāhmana, too, which is merely a continuation of the Taittiriya-Samhitä (but not necessarily later than it for that reason), and which, too, owes its origin as a separate treatise to the influence of the Rigvedic tradition,33 Mantra and Brahmana, have not been separated.34 It is a peculiar feature of the Taittiriya texts that the Samhitā and the

Brāhmaṇa of this school supplement each other in such a way that each seems to presuppose the other.

The relative chronology of the extant versions of the Black Yajurveda has long been an interesting but unsolved problem.35 Language in this case fails to provide a dependable criterion, for, in spite of inevitable unimportant linguistic peculiarities of each, all of them may be said to speak in the same language.36 The treatment of the Rigvedic Mantras in the Samhitas of the Black Yajurveda is interesting: the Kathaka and the Maitrayani in this respect often agree with each other against the Riqueda and the Taittiriya.37 which should indicate, if Oldenberg's well-known theory is true that slavish conformity to Rigyedic text is a sign of comparative lateness of Yajurveda-Samhitas,38 that the Kathaka-Kapishthala-Maitravani may have been older than the Taittiriya. As regards the Brahmanaparts of the Taittiriya-Samhita, Keith39 has shown that they are later than the older first five Panchikas of the Aitareya-Brahmana and older than the Satapatha-Brāhmana, but anything more precise about their relative or absolute date cannot be hazarded

If slavish conformity to the text-tradition of the Rigveda is indicative of comparative lateness, then the Samhitas of the White Yajurveda must be regarded as comparatively late, to judge them by the Rigvedic verses quoted in them, as amply demonstrated by Oldenberg.40 Moreover the Vajasaneys-Samhita lacks that general uniformity and homogeneity which pervades not only the whole of the Taittiriua-Samhita but extends also to the Brahmana and the Aranyaka of the Taittiriva School. Of the forty odd Adhyavas of the Vājasaney-Samhitā, it is quite evident that the last twentytwo were added later41 gradually to a basic text consisting of the first eighteen. As a rule only the formulas found in the first eighteen Adhvavas occur also in the Taittiriua-Samhita, while those of the last twenty-two are met with in the Taittiriua-Brāhmana,42 The next three Adhyavas (XIX-XXI) give the Mantras of the Sautramani, a sacrifice performed to expiate the sin of excessive indulgence in Soma, and the following four (XXII-XXV), those of the horse-sacrifice. The remaining fifteen Adhyayas (XXVI-XL) are expressly called Khila in the ancillary literature.43

4 Atharnaneda

The Atharoaveda is utterly different from the other three Vedas discussed above, for though an effort was made at a comparatively late date to absorb it within the sacred Srauta-literature by furnishing it formally with a Srauta-sūtra with the significant designation Vaitāna-sūtra, 44 yet it was never accorded full recognition in the ritual of the Soma-cult, and to the last it remained essentially what it was from the start—a prayer-book of the simple folk, haunted by ghosts and exploited by Brāshmins. 45 In its pre-

VEDIC LITERATURE-GENERAL VIEW

sent form the Atharvaveda is certainly the latest of the four Samhitas, but in contents it is by no means so, for there can be no doubt that Bloomfield46 was perfectly right in characterizing the Atharvaveda as follows: "On the whole the Atharvaveda is the bearer of old tradition not only in the line of the popular charms; but also to some extent, albeit slight, its hieratic materials are likely to be the product of independent tradition that has eluded the collectors of the other Vedas, the Rigveda not excepted." At the same time, however, it is quite clear that the hymns and charms of the Atharvaveda were collected in a Samhita and handed down to the present day only because the Brahmanical ritual gradually extended its sway over profane superstition, and by degrees granted a grudging recognition even to frankly magical incantations that were originally doubtless of non-Brahmanical inspiration. This is proved strikingly by the Khila-hymns of the Atharvaveda, the so-called Kuntapasüktas, of no particularly sacred character, which, as Bloomfield has amply demonstrated,47 were nevertheless retained and handed down in tradition, apparently only because they were indispensable for a popular cult that had succeeded in wringing recognition from the circle of sacerdotes

The Sainhitā of the Atharvaveda is now before us in two recensions,46 the Saunakiya recension,49 and the Paippaläda recension.50 It is the Saunakiya-Sainhitā that is usually meant when the Atharvaveda is mentioned in ancient or modern literature. But the earliest references seem to have been to some other (probably Paippaläda) recension. Pataňjali's statement on Pāṇini V 2 37 to the effect that the text of the Angirases consists of twenty chapters may apply to both the recensions, since each consists of twenty Kārdas, but the initial verse of the Atharvaveda as quoted by Pataňjali and also in the Gopatha-Brāhmāya is not the opening verse of the Saunakiya recension.50 but of the Paiponaläda text.52

Of the twenty Kārodas of the Atharvaveda, a the last one is manifestly a later addition manufactured almost wholly out of borrowings from the Rigueda to serve as a manual for the priest called Brāhmaṇāchchhamsin who had a definite, though minor, rôle to play at the Soma-sacrifice. Moreover the Kuntāṇa-sūktas of this Kāṇḍa are without any Padapāṭha, and nothing parallel to them can be found in the Paippalāda recension—showing that they had been given a place in this late Kāṇḍa of the Samhitā at a very late date. In fact, the nineteenth Kāṇḍa ends with a significant prayer which strongly suggests that the Samhitā at one time was considered to end with it. But there are reasons to believe that the nineteenth Kāṇḍa itself is a late compilation, for its hymns, though found in the Paippalāda recension, are scattered throughout that text. Both the nineteenth and the twentieth Kāṇḍas have been ignored in the Prātišākhya of the Atharvaeveda. The eighteenth

Kāṇḍa, consisting of four funeral hymns, should also be regarded as a later addition, for its contents are absent in the Paippalāda-recension. The seventeenth Kāṇḍa, consisting of only one hymn of purely magical contents, is a curious anomaly, and must be regarded as a late accretion, though partly appearing also in the Paippalāda text. The most interesting of all the Kāṇḍas is the fifteenth, composed not in verse but in typical Brāhmṇan prose, and devoted to the mystic exaltation of the Vrātya. Probably this Vrātya-kāṇḍa was the first of the additions successively made to the original text of the Atharvaveda which has come down to us in two recensions. There is no reason to doubt the antiquity and authenticity of the other Kāṇḍas of the Atharvaveda.

2. THE BRAHMANAS

The Brāhmapas are, if possible, ritual texts of an even more pronounced type than the Sainhitäs, for though the hymns and charms of at least the Rigueda and the Atharvaveda need not all have been of ritual origin, there is no room for any doubt in the case of the Brāhmapas that the sole object of their authors was to speculate on and mystify, but hardly to explain, minute details of Brahmanial sacrifices. The duties of the Hort-prests, who had to recite the Mantras of the Rigueda at the sacrifices, have been luxuriantly speculated upon and mystified by the authors of the Brāhmapas of the Rigueda, those of the Udgātri-priests in the Brāhmapas of the Sāmaveda, etc. All that is found in the Brāhmanas that is not directly concerned with ritual is, strictly speaking, irrelevant and unnecessary from the view-point of their authors

The Aitareya and the Kaushitaki (or Śānkhāyana) are the Brāhmanas of the Rigveda, and of them the former is older in date and bigger in bulk, but the latter is richer in contents. But the Aitareya itself is plainly a composite work, its first five Panchikas being older than the last three. Similarly, only two Brahmanas of the Samaveda have been preserved, namely the Jaiminiua and the Tanduamaha-Brahmana, the latter also known as the Panchavinia-Brahmana on account of its twentyfive chapters, to which a supplementary chapter was added that somehow came to be regarded as an independent treatise with the singular designation "Shadvinia-Brähmana" The Jaiminiva-Brahmana is indeed one of the most interesting works of the later Vedic literature, and rivals in importance the Satapatha-Brāhmana⁵⁸ of the Yajurveda, for in elucidation of the details of ritual the authors of these two Brahmanas have introduced numerous stories, mostly of an aetiological character, which nevertheless throw welcome light on social conditions. Regarding the relation between the two recensions of the Satapatha-Brahmana. namely Mādhyandina and Kānya, Caland has expressed the opinion

VEDIC LITERATURE-GENERAL VIEW

that both existed from the very beginning, but later the Kāṇva-recension was influenced by the other.⁵⁷

It is also clear at the same time that neither the Mādhyandina nor the Kanva recension of the Satapatha-Brahmana has been handed down to us in its original redaction, for quotations from the Satapatha m early literature are often missing in both the recensions. Moreover, it is certain that the Brahmana in both its recensions is a composite work. For though Yājñavalkya Vājasaneva is the authority most frequently quoted in the Satapatha, yet in both the recensions there are five Kandas (Kandas VI-X in Madhyandina corresponding to Kandas VIII-XII in Kanva) dealing with the construction of the fire-altar, in which the authority quoted is Sāṇḍilya and Yājñavalkya has not been mentioned at all. It remains still to mention only one of the more important Brahmanas, namely the Gopatha-Brahmana of the Atharvaveda, consisting mostly of slightly modified quotations (without acknowledgment) from other sources. It gives the impression of being so late that Bloomfield58 declared it to be more recent than even the Śrauta-sūtra (Vaitāna) and the Grihyasūtra (Kauśika) of the Atharvaveda.

3 THE SRAUTA SUTRAS

Puerile speculation on the minutiae of ritual, so much in evidence in the Brähmanas, developed in the direction of pure speculation in the Aranyakas and Upanishads. Winternitz⁵⁹ has truly said that "it is often difficult to draw the line between the Aranyakas and the Upanishads" Only it is necessary to remember that it is no less difficult to draw the line between the Brahmanas and the Aranvakas. Among the Srauta-sūtras, too, there is at least one text namely the Baudhayana Śrautasūtra, which it is difficult not to regard as a late Brahmana. Thus a fine line of demarcation between Brāhmana, Āranyaka and Śrauta-sūtra is out of the question Yet it would be correct to say that the speculative spirit developed in the Brahmanas in connection with ritual ceremonies tried to burst its irksome fetters in the Aranyakas, and in some of the Upanishads attained the stage of as complete an independence as was ever witnessed by man. The Aranyakas and Upanishads,60 though nominally connected with the Brahmanas, should rather be regarded as the beginning of purely speculative thinking in India Much more closely connected with the older Vedic literature (Samhitās and Brāhmanas) are the Śrauta-sūtras, and to a lesser extent, the Grihvasütras.61

The Srauta-sūtras describe⁶² the ritual sacrifices in a language that is both vigorous and prophetic in brevity, but is also utterly unintelligible for that very reason. No greater contrast can be imagined than that between the Brāhmanas and the Śrauta-sūtras, though the subject of treatment is the same in both. Both are

obscure, but for different reasons: the Brāhmanas, because of loose thinking, and the Śrauta-sūtras, because too much is taken to be understood in them. Moreover the Śrauta-sūtras, isolated the common and special features of the sacrifices and cleverly dealt with them as if they were digits of number, and that by itself must be regarded as an intellectual achievement of no mean order.⁵³ Truly scientific spirit is unmistakably reflected in the Śrauta-sūtras, albeit the subject to which this spirit was applied was still magic pure and simple.⁶⁴

The Śrauta-sūtras of Aśvalāvana and Śānkhāvana belong to the Riggeda, which means that the ritual duties of the Hotri-priests have been presented in them in a systematic form But some of the verses quoted by Pratika in the Sankhayana Śrauta-sūtra cannot be found in the Sākala-recension of the Rik-samhitā,65 and so it is surmised that it was affiliated to the Bashkala-śakha and not to the Sākala-sākhā of the Rigveda As regards the Brāhmanas, its affiliation is to the Kaushītaki and not the Aitareya-Brāhmana Of its eighteen chapters, the last two, though not necessarily of later origin, were a later addition, dealing with the Mahavrata, a popular festival that was given a Brahmanical complexion at a later date. The Aśvalāyana Śrauta-sūtra, on the other hand, is affiliated to the Sākala-šākhā of the Rik-Samhitā, and the Astareya-Brāhmana these two Śrauta-sūtras of the Rigveda, Śānkhāvana's should be the older, for its language in some places is like that of the Brahmanas The principal Śrauta-sūtras of the Sāmaveda arc those of Lātvāuana, and Drāhuāuana the first affiliated to the Kauthuma-śākhā and the latter to the Ranayaniya-śakha A remarkable feature of the Lātyāyana Śrauta-sūtra is that the Śūdras, Nishādas, and Vrātyas have not been treated in it as accursed human beings as is generally the case in other Vedic texts.66

The Apastamba Śrauta-sūtra of the Black Yajurveda, belonging to the Khandikiva school of the Taittiriuas, is in many respects the most important work of this genre, for no other single work gives such an ample (though by no means complete) description of the Vedic sacrifices; but the numerous quotations from other ritual texts found in it suggest that it should not be placed too high in date. The Satyāshādha Srauta-sūtra is a particular recension of the Apastamba Srauta-sütra, The Apasthambins seem to have been prejudiced against the Kanvas and Kasyapas, for their Srauta-sütra (XIII 7 5) forbids the giving of presents to them. The oldest and the most archaic of all the known Srauta-sutras is certainly the Baudhayana Śrgutg-sūtra,67 also of the Black Yajurveda. In style it still resembles a Brahmana in most respects, and according to tradition it belongs to the Khandikiya-school like the Apastamba Śrauta-sūtra The White Yajurveda is represented in the Srauta-sutra literature by the Katyayana Srauta-satra, of which a striking feature is that

VEDIC LITERATURE-GENERAL VIEW

three of its Adhyāyas (XXII-XXIV) are devoted to Sāmayedic ritual. Among the teachers cited by name in it are found some of the Black Yajurveda.68

Lastly, the Atharvavedins too got their Srauta-manual in the shape of the Vaitana-sutra-anomalously enough, for the Atharvaveda has, strictly speaking, nothing to do with Srauta-ritual. But since the Samhita of the Brahmanachchhamsin, one of the priests participating in Soma-sacrifices, came to be appended to the Atharvaveda69 the way was apparently opened thereby for the despised Atharvavedins to make inroad into the protected field of Srautaritual. The result of this novel experiment was the Vaitana-sutra But as Bloomfield has observed, "it is not the product of practices in Srauta-ceremonies which have slowly and gradually developed in a certain high priestly school, but a somewhat conscious product. made at a time, when the Atharvavedins began to feel the need of a distinctive Srauta-manual to support their claim that the Atharvaveda is a canonical Veda of independent and superior character."70 Strictly speaking, the Vaitāna-sūtra is the Śrauta-sūtra only of the twentieth Kanda of the Atharvaveda and not of the whole of it. And since this Kanda is nothing but the Samhita of the Brahmanachchhamsın, the Vaitāna-sūtra may quite appropriately be called the Śrauta-sūtra of the Brāhmanāchchhamsin. It may be noted that only 18 verses71 of the twentieth Kanda of the Atharvaveda have not been assigned univoqu in the Vaitana-satra

1 See supra, p 203

la The Upanishads and the Grihva-sutras are not being taken into consideration

1a The Upanishads and the Grihva-elitras are not being taken into consideration in this chapter, for they are telated more intimately to the post-Veide than to the Veide literature proper. They will be discussed in later chapters it was posted to the state of the veide of the state of the veide of the state of the veide of the state of th lies only in the Khilas

2a This is why we have six "family Mandalas" in the Rigueda This point has been fully demonstrated by Bergaigne Strictly speaking, the Rigueda that we know is the Sasiriya redaction of the

Sākala recension of the text

All the Vedic scholars, however, excepting Leopold von Schroder, who assigned a place in ritual even to the dialogue-hymnis (Mysterium und Minus in Ripveda, p 36), have answered this question in the negative, though not all with equal emphasis

emphass
4 Il has to be remembered, however, that some special kinds of ritual formulas
such as the Praisht, and Nivid-mentrias, though indispensable for ritual from
the earliest period, have nowhere been collected in a Smith
5 RV, II, 190
6 RV, VII 59, 12; X 20, I, X 121, 10
6a Because Yakka (VI 28) when referring to him uses the perfect tense (chekdra).
This is definitely proved by the material collected in Bloomfield's Rigueda Repetitions

AS See on this point particularly Oldenberg, Prolegomena, p 387
8a. Thus, when as a result of the growing complexity of the Srauta-ritual an additional assistant of the Hotá (nominally of the Brahman) had to be included among the usual band of priests in the person of the Brahmanāchchhamsin, a

new Samhtá too had to be created for him which was appended at a very late date to the Atharvaveda, forming its last Kända (Oldenberg, op ct., p. 347, Das Veitsmastira des Atharea.weda, therestet von W. Caland, p. vi)

10 Hillobrandt's theory has been crincized—not quite fairly in our opinion—by Oldenberg (Prolegomens, p. 519) Variant reading of Bit-texts in later ritual interature should not however, be taken as proof in support of Hillebrandt's theory, for the variations might have been due to intentional alteration of the theory, for the variations might have been due to metantional alteration of the Despondence of the Company of the Compan

are dedicated solely to Soma Pavamana and not to Soma This point has been particularly stressed by Oldenberg, Prolegomena, pp 252-3. Authors' lists given in ancillary literature (Anutrumanis), though containing many apparently spurious names, are on the whole quite trustworthy and fully in conformity with the internal data of the hymns. For a different view on this

point see Winternitz, op cit, p 58
15 This systematic reversal of the natural order of the gods is not without signifirane ladra is undoubtedly the most powerful god in the Veduc religion, but in Veduc ritual Agui may claim the first place—since no sacrifice is possible without fire. This again goes to support the view that the redactors of the Riksamhita were guided chiefly by considerations of ritual

- 16. Prolegomens, p. 182

 17. Prolegomens, p. 182

 18. Prolegomens, p. 182

 17. The state of the
- 17a That is to say, all the family-Mandalss might have been constituted out of the then existing material in one day or in one minute, but the cighth Mandala, of which the most essential part is manifestly its large number of Pragatha-hymns which originally should have been distributed—not necessarily equally—among all the family-Mandalas (like the Apri-hymns'), could be constituted only after the family-Mandalas.

18 See Oldenberg Prolegomena, p. 250

19 Attempts galore have, however, been made to achieve the impossible, the last and the most elaborate attempt being Wust's Stilleeschichte und Chronologie des Rypeda (Leipzig 1928) in which previous literature on this problem has been fully indicated Cf below, Ch XVI

20 Ct below, Cn Avi.
Oldenberg, Prolegomena, p 328
22 By "Sămaveda" is to be understood the Kauthums-săkhā of this Samhitā, with which perhaps the Samhitā of the Ranayaniya-sākhā was identical. The Januniya-Samhitā has been edited by Caland

22 Readings of this large number of common passages are, however, not identical in both the Vedas Ludwig, siter an elaborate comparison of all these passages (Der Ryueda, Vol. III, pp. 33 ff) came to the conclusion that in many passages the Samaueeda has actually retained the original reading and not the Ryueda But Ludwigs theory has been severely critizated by Oldenberg (Prolegomena, pp. 288 ff)

24. Much as it was conventional to regard the Padapatha as the source of the

Samhita-text

25. The Uhagana and Uhyagana are not regarded as canonical

By "Pragatha" are meant complexes of two verses of which the second is a Satobribati and the first either a Bribati or a Kakubh (see Rikprätisäkhya, XVIII 1.), in actual application, however, every Pragatha has to be artificially

expanded into a Tricha

27 Quite a number of Trichas of the Uttararchiks, however, have nothing to correspond to them in the Purvarchika that is because all of them are chanted uniformly on the Gayatra-melody composed on the well-known Savitrī-mantra tital souther — parenyam, etc.). On the other hand, many Yonis of the Purvar-chika are without a correspondent verse in the Uttararchika: this is perhaps because the sacrifices at which the Samans concerned were chanted were not Soma-sacrifices (see Caland, Pańchawinśa-Brahmana, Translation, Introd., pp x-x1),

VEDIC LITERATURE-GENERAL VIEW

- 20 The chronological relation between the Flurachika and the Uttararchika has been always one of the drief problems for the chronological relationship of the problem seems insoluble. See on this point particularly Claimachian, but the problem Suryakanta, Rifetartur, pp. 25 ff where previous literature on this important problem has been indicated and the problem has been indicated by Ysjurveda-texts are by no means guide-books in the sense that any person by
- studying them can form a picture of the ritual ceremonies dealt with in them. studying them can form a picture of the ritual ceremonies dealt with in them. In face even by studying the relevant portions of the Samiltas, Brahmapas, and Sitras in the light of the commentaries it is not possible to reconstruct fully study to the study of the st
- (I. 13.8)
- 30a Regarding differences of reading between these two, see Caland, Kanva-satepatha, Introd, p 91.

 31 Formerly it used to be tacitly assumed that the Sukla-Yajurveda is so called
- because Mantra and Brahmana are not mixed up in it as in the Krishna-Yajurbecause Mantra and Brähmann are not mixed up in it as in the Krishna-Yajur-veda But it is more probable that the reductors of the former claimed to have collected in it only the skickims polymeth "white or pure Yajur" (Yed Ind. et al., 1997). The skickims polymeth with the probable of the names "White Yajur-veda" and as a contrast, "Black Yajur-veda" 22. As pointed out long ago by Max Muller, HASL, second edition, 1880, p. 433, and emphasued by Weber, H.H., p. 106 ff. 35 See Keith, HOS, XVIII, p. bxvv. Octain sections of the Tastitrija-Brähmann, such as those on human sanctine (III 43) and Nakshutrashtayah (I.5) are certain sections.
- tainly of later origin
 - 34 The same applies, mututis mutandis, also to the Taittiriya Aranyaka "The
 - Sûtras do not recognire any distinction between the Arangeka, the Brahmena, or the Samhida as regards their Brahmana pottons' (Ketth, ibid., p. 1xxvi).

 Schroder in his preface to the Mantrayent Sanhida indeed tred to prove the priority of the Käthaka and Maitrayani recensions, but failed to convince any
 - 36 Keith arrived at this conclusion regarding Taittirīya, Maitrāyanī, and Kāthaka (see HOS, XVIII, p xcvi). As regaids the Kapishthala, see Oertel, Zur Kapiş-
 - thala-Katha-Samhtin, Munchen, 1934

 thala-Katha-Samhtin, Munchen, 1934

 see Keith, op cit, p lxvii it should be noted that the Kapushthala, which is closely related to the Kathaka, agrees with the latter to differ from the Rigueda in 64 cases, and agrees with the Rigneda to differ from the Kathaka in 45 cases (Certel, op cit, pp 9 ff)

 Prolegomena, p 319
 - 39 Op cit. p xeix This applies, pari passu, also to the Brahmana-parts of the other Samhitas of the Black Yajurveda
 - 40 Prolegomena, p 318 Caland also says "there can be no doubt whatever that the White Yajurveda is on the whole younger than the Black Yajurveda"

 - we make Enurveal as on the whole younger fram the Black Yajurveda (Kause Satepatha, Introd, p. 22).

 42. See Eggeling, SBR, XII. p. xxx.

 43. See Eggeling, SBR, XII. p. xxx.

 45. For further details about the Vāgasaney-Samhitā, with which the Samhitā of the Kānva-school is practically identical, see Weber, HIL. 107 ff.

 The word Variathica against Srotijaa manthaning three fires (see Hillebrandt,
 - Rivalliteratur, p. 69) Bloomfield's excellent monograph on the Athervaeda—like which unfortunately there is as yet nothing on any one of the other Samhitās—offers practically everything that a student of the Vedic literature might wish to know about the Atharvaveda. The section on the Atharvaveda in this chapter is mainly based on Bioomfield's monograph (published in the Grundriss)
 - Op. cit., p. 50
 - 47. Op cit, pp. 97-100 For other recensions, see Bloomfield, op. cit, p. 12

 - Published many times.
 Edited by Raghu Vira

 - S. As pointed out by Weber, Ind. Stud., XIII, p. 433
 52. As surmised already by Bloomfield, op. cit., p. 460
 52. As surmised already by Bloomfield, op. cit., p. 460
 53. Always the Saumakiya recension is to be understood unless the Paippaläda is specifically mentioned.
 55. See foothorte Sa.

- 55. A complete edition of this important text by Raghu Vira is now appearing from Lahore The most interesting parts of it were published by Caland in his "Auwrahl." For details about it see Caland, Over on in the Jaimsing-Brahmanu Some parts of the Jaimsing-Brahmana were published for the first time by the present writer in his Collection of Fragments of Loss Pathmanas (Calcutta,
- 56. Of which the Mādhyandina recension was published long ago by Weber and the Kanva recension has been published by Caland (the first volume in 1923 and the second in 1940) from Lahore.

 57 Caland, Könva-Satapatha, Introd, p 90
- 58 Op cit, p. 102 Bloomfield's view appears to be the right one but it is opposed
- by Caland (Vaitana Sutra, p. 1v). 59. HIL, I, p. 234.
- A convenient account of them has been given by Winternitz, op. cit. pp 225 ff The Dharmasutras retained only a nominal affiliation to particular Vedic schools 62 Or rather prescribe, for the style is throughout prescriptive, and not descriptive This characteristic of the Srauta-sutras is shared also by the Grihya and Dharma-
- sūtras The Brahmanas, however, are truly descriptive 63 To a lesser extent this method was followed also in the Grihya-sūtras
- 64 The following brief account of Srauta-sutras is mainly based on Hillebrandt,
- Ritualisteratur, § 7.

 These Pratitas have been collected by Hillebrandt in his edition of Sánkh Sr S, Vol. 1, p. 623.
- A Sudra can be killed at will according to Att Br., VII 29 4.
- 67. This is the opinion also of Winternitz, op cit, p 278
- 68 See Weber, HIL, p 139 69 See footnote 8a above
- 70 Op cit., p 16
- 71 According to the computation of Caland (Vaitana-Sūtra, p vin).

CHAPTER XIII

۸.

ARYAN SETTLEMENTS IN INDIA

I. GEOGRAPHICAL NAMES IN THE RIGVEDA

Although it is difficult to arrive at any definite conclusion regarding the original home of the Indo-Aryans, we are in a somewhat better position in respect of their early settlements in northern India and gradual expansion over the whole of this area. For here the evidence of Vedic literature comes to our aid, and fortunately the earliest part of it, the hymns of the Rigveda, contain abundant geographical data. It is a reasonable presumption that the geographical names which figure prominently or frequently in these hymns indicate regions which were familiar to their authors, and were scenes of the early activities of the Aryans. Names less promment or frequent might be either outside settlements of the Aryans or the border regions inhabited by non-Arvans. It must be remembered, however, that the Rigveds is not a geographical manual and its various recensions have not come down to us in a complete form. It would, therefore, be unsafe and hazardous to draw any inference from the silence of the Rigveda. The non-mention of any locality in the hymns cannot be construed as evidence, one way or the other, unless, of course, it can be proved to be of such importance as to be inexplicable except on the hypothesis of want of knowledge.

In order to ascertain the extent of the Aryan settlements in the period of the Rigueda, we should, therefore, consider the references to mountains, rivers, localities, countries, tribes, and kingdoms contained in the hymns. Courses of rivers, especially in the Punjab, have considerably changed in the course of the last three or four millennia. Their names have also varied in different times. There is, therefore, some difference of opinion with regard to the identifications of the rivers mentioned in the Vedic texts. The same is the case regarding the location of the various tribes and countries that figure in the Vedic texts, as their boundaries were subject to constant modifications and they were known by different names in different periods. But in spite of these difficulties it is possible to form a fair idea of the location of quite a large number of them.

As regards mountains, only the Himālaya is directly mentioned in the Rigveda, Mūjavant, one of its peaks, being referred to as the source of Soma. According to Zimmer, this peak was probably on the south-west of the valley of Kāshmir

Rivers have all along played an important part in the lives of the Hindus, and even in the Rigvedic age they were esteemed as detties, presumably on account of the immense benefits they conferred on humanity. Out of thirty-one rivers mentioned in the

Vedic texts, about twenty-five names occur in the hymns of the Rigueda alone. In the celebrated Nadistuti (X. 75), the Rigueda enumerates several streams most of which belong to the Indus system.

Outside the rivers in the Indus basin, are mentioned Ganga. Yamunā, Sarasvatī, and Sarayu. Gangā does not appear to be a well known or even important stream in the period of the Rigueda. Yamuna has been mentioned thrice in the Riggeda, which refers to the great victory of Sudas and the Tritsus on the Yamuna in the famous Dāśarājāa. The Sarasvatī is the river par excellence (Nadītamā, RV, II 41, 16), and occurs most frequently in the Rigveda. It seems to have been the holy stream of the Vedic age. In the enumeration of rivers in the Nadistuti (X. 75.5) Sarasvatī comes between the Yamuna and Sutudri, and is generally identified with the modern Sarsuti, which is lost in the desert at Bhatnair. Roth, Zimmer, Griffith, and Ludwig hold that in many passages of the Rigueda the Sindhu is meant by the Sarasyati.1 It may be observed in this connection that it is possible that the Sarasvati was as large as the Sutlei in the Vedic age, and actually reached the sea, as the Rigveda (VI. 61.2, 8; VII. 95.2) describes it as going to the ocean. The Sarasvatī was the first of the Vedic rivers (II.41 16) and its banks witnessed the development of the Vedic sacrifices

The Drishadvati, which occurs many times along with the Sarasvatī as an important stream, is identified by some with the Ghaggar and by others with the modern Chittang? Between the Sarasvati and Drishadvati, flowing past Thanesar, was the Apays (RV, III. 23.4), a small tributary of the Sarasvati The Gomati has been identified by some scholars with the Gomati, which meets the Ganges to the east of Benares, and this identification may be accepted in so far as the later Samhitas and Brahmanas are concerned. The Gomati of the Rigveda as mentioned in the Nadistuti is, however, placed between the Kubhā and Krumu. Hence, its identification with the Gomal, a western tributary of the Indus. seems more reasonable. Sarayu, on the eastern bank of which Chitraratha and Arna were defeated by the Turvasa-Yadus, appears to be the modern Sarju in Oudh, as suggested by Zimmer and others.3 The identifications by Ludwig with the Krumu (Kurram) and by St. Martin with the united course of the Sutudri (Sutlei) and Vipāś (Beās) are difficult to accept.

Then we pass on to the five streams, viz. the Sutudri, Vipšā, Parushnī, Asiknī, and Vitastā, which give the Punjab its name and united together, flow into the Indus. The Nadīstuti omits the Vipšā and inserts the Marudvidhā between the Asiknī and Vitastā. The Sutudri is the most easterly river of the Punjab identified with the modern Sutlej. True to its name, it has considerably changed its course even during historical times. Vipāš, "fetterless," is the modern Beās, which has also changed its course considerably. Its

ARYAN SETTLEMENTS IN INDIA

non-mention in the earlier Vedic literature except in two Rignedahymns, coupled with its absence in the Nadistuti-hymn, supports the hypothesis that it was of small importance.

Parushni, the modern Rāvi, was an important stream which played a decisive part in the Dūšardjiāz (battle of the ten kings), by rising and drowning the enemies of Sudās. Askini, known later as the Chandrabhāgā, is the modern Chenāb in the Punjab. Finally comes Vitastā, the most westerly of these five rivers, known today as Jhelum. Roth and Zimmer consider that the Marudvjidhā mentioned in the Nadāstuti (X. 75.5) denotes the combined waters of the Asiknī (Chenāb) and Vitastā (Jhelum) down to its junction with the Parushnī (Rāvi), and Chakladar accepts this view.* Stein, however, rightly places the Marudvjidhā in Kāshmir, identifying it with Maruwardwan, a small Kashmiran stream flowing from norto to south which joins the Chenāb on its northern bank at Kashtwar. Yaska identifies the Arjikiyā and Sushomā, mentioned after the Vitastā in the Nadāstuti, respectively with the Vipās and the Sindhu.^o

Now we turn to the western tributaries of the Indus. The Rasā has been identified with the Jaxartes, a stream in the extreme north-west of the Vedic territory. The Kubhā is the modern Kābul river which flows into the Indus a little above Attock and receives at Prang the joint flow of its tributaries, the Swat (Suvastu) and Gauri. The Krumu or the Kurram and Gomatī or the Gomal are tributaries of the Indus meeting it further south. The Susartu and Svetyā appear to have been the tributaries of the Indus above the Kubhā, whereas the Mehatnū, Krumu, and Gomatī are the three tributaries below the Kubhā.7 The Suvāstu, as already stated, is the Swat, a tributary of the Kubha, which itself is a tributary of the Indus. The word Suvastu, signifying "fair dwellings," seems to indicate that there was an Aryan settlement along its banks. yūpīvā, the scene of the defeat of the Vrichīvants by Abhyāvartin Chāyamāna (RV, VI. 27.5) has been taken either as denoting a place or a river. As a place-name Harappā has been suggested as the modern name of Hariyūpīyā 8 Many other lesser streams have not yet been identified with any degree of certainty, and are not mentioned here.

In conclusion, we must consider also the implication of the term *Saptasindhavab*, as used in the *Rigreda*. The term means a definite country in *Rigreda*, VIII. 24.27, whereas at other places seven streams themselves are intended According to Max Müller, the seven rivers are the five rivers of the Punjab along with Indus and Sarasvati Ludwig, Lassen, and Whitney substitute Kubhā for the Sarasvati and think that originally the Oxus also must have been one of the seven. Considering that the *Rigreda* mentions the Kubhā (Köbul), Gomati (Gumail), Krumu (Kurram), Suvāstu

(Swit), etc., which lie to the west of the Indus, it is possible that the Rigvedic people knew of the existence of the Oxus. The reasonable view, however, appears to be to take the seven streams to be the Indus, the five streams of the Punjab and the Sarasvati.

We may thus conclude that the extent of the country as reflected in the hymns is, Afghānistān, the Punjab, parts of Sind and Rājputāna, the North-West Frontier Province, Kāshmir, and Eastern India up to the Sarayu.

This conclusion is confirmed by another consideration. That the Vedic people had not yet penetrated into the swampy jungles of Bengal may be inferred from the absence of the mention of the tiger in the Rigueda which assigns the premier place to the lion.⁶²

There is a difference of opinion among scholars as to the part of India where the bulk of the Rigueda was composed. Max Müller, Weber, Muir, and others held that the Punjab was the main scene of the activity of the Rigueda, whereas the more recent view put forth by Hopkins and Keith is that it was composed in the country round the Sarasvati river south of modern Ambäla.⁹ Brunnhofer, Hertel, Hüsing, and others, however, argue that the scene of the Rigueda is laid, not in the Punjab, but in Afghānistān and Irān. ¹⁰ These and other theories need not be discussed in detail. Keith has rightly observed that "conclusions can be drawn only with much caution. It is easy to frame and support by plausible evidence various hypotheses, to which the only effective objection is that other hypotheses are equally legitimate, and that the facts are too imperfect to allow of conclusions being drawn. ^{9,11}

As the names of the rivers in the Rigueda show that the Vedic people knew the whole of the Punjab and occupied the best part of it, there is no need to suppose the bulk of the hymns to have been composed either in Irān or in the Ambāla district.

It is a controversial question whether the Vedic tribes in the day of the Rigneda had reached the ocean and had knowledge of sea navigation. Keith and many other European scholars hold that there is no clear indication in the Rigvedic period that ocean and sea navigation were known. 2 Max Müller, Lassen, Zimmer, and the authors of the Vedic Index on the other hand assert that ocean was known to the Rigvedic people. 13 This seems to be the more probable view. The Sarasvatt is stated to have reached the sea (above, p. 246), and the hymns X. 136, 5 and 6 seem clearly to refer to the western and eastern oceans. References to the treasures of the ocean and to Bhujyu's story appear to allude to marine navigation. The knowledge of high tide can be inferred from Rigneda, I.48.3. All these references indultably prove that the Rigvedic people not only knew the sea, but were mariners and had trade relations with the outside world.

2. THE TRIBES IN THE RIGVEDA

The whole of the territory known to the Vedic settlers was divided into a number of tribal principalities ruled normally by kings. The Dasarajña or the battle of the ten kings is an important historical event alluded to in various hymns of the Riqueda, and as many of the important tribes and personalities figured in this famous battle, it is worth while outlining the conflict. Sudas was a Bharata king of the Tritsu family which was settled in the country which later came to be known as Brahmavarta. At first Viśvamitra. a scion of the Kuśika family of the Bharatas, was the priest of Sudas, and led him to victorious campaigns on the Vipas and Sutudrī Viśvāmitra, however, was dismissed later by Sudās, who appointed Vasishtha as his priest, probably on account of the superior Brahmanical knowledge of the Vasishthas. Thereupon a long and bitter rivalry ensued between the two priests, and in revenge Viśvāmitra led a tribal confederacy of ten kings against the Bharatas, the federation consisting of the five well-known tribes Puru. Yadu, Turvasa, Anu, and Druhyu, along with five of little note. viz Alina, Paktha, Bhalanas, Siva, and Vishanin. In the bloody and decisive struggle on the Parushni, the Bharatas emerged victorious, utterly routing the confederacy, of whom the Anu and Druhvu kings were drowned, and Purukutsa of the Pürus met his death. There was another battle that Sudas had to fight in which the three non-Aryan tribes, Ajas, Sigrus, and Yakshus had united under king Bheda: but these new assailants also met with the same fate and were defeated with great slaughter on the Jumna. The location of these tribes, along with their activities in the period of the Riggeda, will now be considered in the order of their importance as far as possible

The Pharatas, who gave their name to the whole country, are the most important of the Rigvedic tribes. They were settled, in the Rigvedic age, in the region between the Sarasvati and Yamuna The Bharatas appear prominently in the Rigveda in relationship with Sudås and the Tritus, and are enemies of the Pürus Their princes sacrificed on the Sarasvati, Drishadvati, and Apavā, i.e. Kurukshetra of later times Their military prowess in the Rigvedic age, displayed in their successful campaigns both against the Aryans on the west and the non-Aryans in the east, is matched by the superiority of their cult and ritual practices which seem to have attained prominence and supremacy in a later period. Viśvāmitra is referred to as a Bharatarshabha and a Kausika, so that he belonged to the Kuśkia family of the Bharatas.

The exact relation of the Tritsus and Bharatas cannot be determined and there is a sharp difference of opinion among scholars on this subject. The Tritsus occupied the country to the east of the Parushui. Both being enemies of the Parush. Ludwig's identifica-

tion of the Bharatas and Tritsus appears to be correct. Oldenberg. however, takes the Tritsus to be the priests of the Bharatas, thus identifying them with the Vasishthas, whereas according to Geldner, the Tritsus were the royal family of the Bharatas, which appears to be the most probable view. Zimmer's theory representing the Tritsus and Bharatas as enemies is clearly untenable. The Tritsus and their kinsfolk the Bharatas were at war with the various tribes on both sides of the Parushni and Yamuna, as already stated. In post-Rigvedic times, however, they coalesced with the Pürus, their erstwhile enemies, to form the Kuru people of later times. The Rigveda refers to the Spinjayas as being the allies of the Tritsus The Tritsus apparently had hereditary kings to rule over them. One of them, Divodāsa, surnamed Atithigva, was a great conqueror, who successfully fought against the Purus, Yadus, and Turvasas on the one hand, and against Sambara, the Dasa king, the Panis, etc., on the other. Sudas, the son of Pijavana, was a descendant of Divodāsa; his exploits in the Dāśarājāa and against Bheda have been referred to. He was not only a famous warrior, but also a great scholar and composer of hymns

The Purus have been mentioned in the Rigueda along with Anus, Druhyus, Turvasas, and Yadus. Though defeated in the Dāśarājña, the Pūrus were a very important tribe in the days of the Rigveda. They were closely connected with the Tritsus and the Bharatas, and lived on either side of the Sarasvatī. The unusually large number of kings of the Pürus suggests the importance of the tribe. The various names indicate the following genealogy of the Püru kings: Durgaha—Girikshit—Purukutsa—Trasadasyu. Puru kutsa is mentioned as a contemporary of Sudas and a conqueror of the Däsas; a son Trasadasyu is said to have been born to Purukutsa at a time of great distress, probably indicating his death or capture in the famous Dāśarājña.14 The mention of Sudās or Divodāsa and Purukutsa or Trasadasvu in a friendly relation in some passages of the Rigveda suggests the union of the Tritsus, Bharatas, and Pürus to form the Kurus. The name "Kuru" is not directly mentioned in the Rigveda, but the amalgamation of these rival tribes in later Vedic period under Kuru is implied by the name Kuruśravana of a king of the Pūru line as shown by his patronymic Trasadasyava (RV. X. 33.4).

Connected with the Kurus were the Krivis, a comparatively unimportant tribe who possibly lived on the Sindhu (Indus) and the Asikni (Chenāb), and later moved to the east across the Yamunā to the land later known as Paāchāla. The insignificance of the Krivis in later literature as compared with the importance of the Paāchālas is probably due to the fact that the later Kuru-Paāchāla alliance included not only the Bharatas and other tribes but Krivis

also. The Śatapatha Brāhmaņa asserts that Krivi was the older name of the Pañchālas (XIII. 5.4.7).

Closely allied with the Tritsus was the tribe of the Sriñjayas who lived in their neighbourhood, probably in Pañchâla. Hillebrandt locates the Sriñjayas to the west of the Indus, and Zimmer, on the upper Indus. As their allies the Tritsus were in the Madhyadesa, the authors of the Vedic Index rightly suggest that the Sriñjayas may well have been a good deal further east than the Indus. Daivavāta, a king of the Sriñjayas, is celebrated as victorious over the Turvašas and the Vrichivants. Daivavāta's sacrificial fire is referred to, and Sāhadevya Somaka is mentioned in this connection. Prastoka, a Sriñjaya, has been lauded along with Divodāsa. Turvašas were the common enemies of the Sriñjayas and Bharatás.

The Anus, Druhyus, Yadus, and Turvasas were the allies of the Pūrus against the Bharatas. These five, according to Zimmer, are the "five peoples" (Panchajarāh) of the Rigueda. The expression "five peoples" occurs under various names in the Rigueda and later Vedic Interature Who exactly are indicated by the five is not quite certain."

Among the tribes who were hostile to Sudås, the Druhyus, Turvaŝis, and Anus lived between the Asikni and Parushni. The names Yadu and Turvaŝa normally occur together in the Rigneda. These two closely allied tribes lived in the southern Punjab and probably further south. Hopkins regards Turvaŝa as the name of the Yadu king; 1° but the evidence for this is not conclusive. Zimmer identifies Turvaŝas with Vrichivants, but the passages merely show that they were allies The name Turvaŝa disappears from later Vedic literature, possibly because they became merged in the Pańchâla people

The Matsyas in the epic age lived to the west of the Sūrasenas of Mathurā, ie in modern Alwar, Bharatpur, and Jaipur, which was probably their home also in the Rigvedic age. 17

The Ajas, Sigrus, and Yakshus were probably the eastern people They are generally regarded as non-Aryan, though there is no definite information on this point.

The Pakthas, Bhalānases, Vishāṇns, Alnas, and Sivas were the five frontier tribes. The Pakthas lived in the hills from which the Krumu originates Zimmer locates them in eastern Afghānistān, identifying them with the modern Pakthun. South of the Pakthas stretched the Bhalānases for whom Zimmer suggests east Kābulistān as original home. The Vishāṇins, so-called probably because their helmets were horn-shaped or ornamented with horns, were, like their allies, a tribe of the north-west located farther down between the Krumu and the Gomati. North-east of Kāfiristān has been suggested as the location of the Alinas, who were closely allied with the Pakthas, and were certainly the enemies of Sudās,

and not his allies, as thought by Roth. The Sivas lay between the Sindhu and Vitastā in the Vedic period. 18

Now we turn to the other tribes which have not been directly mentioned as participants in the *Dāśarājňa*, or in any of the wars wared by Sudās.

The Chedis, who dwelt probably between the Yamunā and the Vindhyas, had a very powerful king named Kasu who is said in a Dānastuti (VIII. 5.37-39) to have made a gift of ten kings as slaves to his priest. The Puranic literature represents the Chedis as an offshoot of the Yadus.

The Ušinaras are mentioned in the Aitareya Brāhmaņa as dwelling in the middle country along with the Vašas and the Kuru-Pañchālas. There is nothing to support Zimmer's conjecture that the Ušinaras in the Rigvedic times lived farther to the north-west, and it is reasonable to suppose that in the Rigvedic period also they lived in the middle country.

The Gandhāris, one of the frontier peoples, lived to the extreme north-west of India. The good wool of the sheep of the Gandhāris has been referred to in the Rigveda (I. 126. 7). According to Zimmer they were settled in the Vedic times on the south bank of the Kubhā up to its junction with the Indus and for some distance down the east side of the Indus itself.

Ludwig and Weber find in certain Rigvedic passages which mentioned Prithu-Praśvah (RV, VII. 83. 1: meaning "with large rībs," or "with broad axes") a reference to the Prithus and Paršus, i.e. the Parthians and the Persians. The meaning and sense in the passages, however, require the word Paršu to be taken as "rībs." In a passage of the Rigveda (VIII. 6 46) Yadu is brought into special connection with the Paršus It cannot, however, be definitely stated that the Paršus were Persians

The Pārāvatas occurring in several passages of the Rigueda have been rightly taken as a people on the Yamunā on the strength of the mention of the Sarasvatī in their connection (RV, VI. 61. 2) as also of their location there in the Paūchavimśa Brāhmawa. Their location on the northern borders of Gedrosia, as proposed by Hillebrandt and Geldner. does not appear to be correct.

The Kikatas occur in the Rigreda (III. 53. 14) as a people under Pramaganda's leadership end hostile to the singer. Zimmer, on Yāska's authority, takes these people as non-Aryans and locates them in the country later known as Magadha. Weber accepts the location but takes them to be Aryans, though at variance with the other Aryan tribes.

The Papis are often mentioned with the Dāsas and Dasyus as the enemies of the Aryans. Though onulent and rich, the Papis never worshipped the gods or rewarded the priests. They have been described as selfish, non-sacrificing, with hostile speech.

greedy like the wolf, niggardly, of cruel speech, Dasyus, Dāsas of inferior status. They were cattle-owners and notorious cattle-litters, and in some passages definitely figure as demons who with-held the cows or waters of the heavens. Vala, whom Indra pierced when he robbed Pani of his cows, appears to be their patron God. Bribu is mentioned as one of their kings. The question of the identity of the Panis has not yet been settled with any degree of certainty. The words Panik or Vanik, Panya, and Vipani, found in Sanskrit, suggest that the Panis were merchants par excellence in the Rigwedic age. The Panis have been variously identified with an aboriginal non-Aryan people; with Babylonians (on the strength of the word Bekanāṭa); with Parnians, the Dahae and other Irānian tribes; and with non-Aryan caravan traders. They might have been the Aryan sea-traders who spread the Aryan culture to the west.

Derived from the same root (das, "lay waste" or "waste away") which originated the word Dasyu, the Dāsas have been described as the enemies of the Vedic people, sometimes of a demoniac character, but many passages speak of them as the human foes of the Aryans. They lived in fortified towns (āyasīb, puraḥ) and were divided into clans (viśah). Dāsavarna has been alluded to a number of times, and the Dāsas are said to be black-skinned (kṛishnat-vach), noseless or flat-nosed (anās) and evil-tongued (mṛidhra-vāch), some of these epithets being shared in common with Dasyus. In the Riqueda, Dāsas is not so reproachful a term as Dasyu As Dāsa in later literature became a synonym for slave, it can plausibly be said that originally the term was applied to captives in war who were enslaved. Hillebrandt and others identify the Dāsas with the Dāhae of Irān, ¹⁸⁴ as they place the scene of activity of the Rivorda in Arachosia, where they locate the Sarasvatī

The Dāsas owned considerable wealth, and Ilibiśa, Dhuni, Chumuri, Sambara, Varchin, Pipru, etc., have been mentioned andividual Dāsa kings, some of whom later received demoniac attributes, and were regarded as celestial foes of Indra and other gods. The Kirātas, Kikaṭas, Chānḍālas. Parnākas, Simyus, etc., were Dāsa tribes who mostly inhabited the Gangetic Valley and fought the Bharatas in their advance to the east and south-east.

Though in many passages the term Dasyu is applied to supernatural enemies, there is no doubt that in several passages the term designates human foes. The main difference between the Dasyus and the Vedic Aryans appears to be religious. The Dasyus without devotion (a-brahman), indifferent to the gods (a-devatu), without devotion (a-brahman), not sacrificing (a-yajaan), lawless (a-varta), following strange ordinances (anyavrata), revilling the gods (deva-piyu), etc. Some of these epithets have been applied also to the Dässas, as compared to whom they are less distinctively a people.

as no clans (viáa), of the Dasyus have been mentioned. Zimmer and Meyer think that the original meaning of the term Dasyu (and Dāsa) was "enemy," which later developed into "hostile country" with the Irānians, while the Indians extended the original signification of "enemy" to include demon foes. That to the Rigvedic bords there was not much difference between the Dāsas and Dasyus would be evident from their sharing some epithets in common, and also from some persons being described both as Dasyu and Dāsa, etc.

The Asuras are generally referred to as enemies of Vedic people and of their gods, but some passages use the term in a good sense. One probable explanation of this has been hinted at before. Another, suggested by Bhandarkar, is that the hymns in which Vedic deities receive the appellation Asura were composed by seers of Asura stock who had embraced the Aryan religion, and the deprecatory passages were composed by Aryan seers antagonistic to the Asuras. The enmity between Aryan and Asura increased in the post-Rievedic period.

It is indeed difficult to identify the Asuras with any of the ancient people. Stem Konow takes them to be non-human Banerji Sastri considers the Asuras as immigrants from Assyria, the followers of the Asura cult who preceded the Aryans in India and were the authors of the Indus Valley civilization. Bhandarkar takes the Asuras to be the Assurs or Assyrians and suggests that the Satapatha Brāhmaņa refers to the Asura settlements in Maradha or South Bihār

The Rakshas does not indicate any definite tribe; according to the authors of the Veduc Index it normally refers to demons in early Veduc Interature, and is applied to human foes only metaphorically. The Pišāchas also likewise are not a tribe in Veduc literature though in later literature it is the designation of a tribe

As a result of the above survey we may briefly indicate the position and extent of the tribal settlements referred to in the Rigeda. Roughly speaking the extreme north-west was occupied by the Gandhāris, Pakthas, Alinas, Bhalānases, and Vishānins, some of whom probably contained non-Aryan elements. In Sind and the Punjab were settled the Sivas, Paršus, Kekayas, Vrichivants, Yadus, Anus, Turvašas, and Druhyus. Further east towards the region of the Madhyadeša were the settlements of the Tritsus, Bharatas, Pūrus, and Sṛlñijayas, the eastern-most part being in the occupation of the Kikatas. The Matsyas and Chedis were settled to the south of the Punjab in the region of Rājputāna and Mālwā. It may thus be reasonably concluded that the Aryan settlements during the period of the Rīgveda were practically co-terminous with the extent of the geographical knowledge of the period, as mentioned above.

THE PERIOD OF THE LATER SAMHITAS, BRAHMANAS, UPANISHADS, AND SUTRAS

1. Geographical Names

We may form a fair idea of the Aryan settlements in the post-Rigwedic period, by utilizing the geographical data of the later Vedic texts and following the same line of enquiry as in the last two sections.

The word Samudra in later Vedic texts generally, if not invariably, means the sea. The reference in the Satapatha Brāhmaṇa (1. 6. 3. 11) to the eastern and western oceans probably suggests that the Arabian Sea and the Indian Ocean were known to the people of that period.

Trikakud (i.e. having three peaks), as the name of a mountain in the Himālayas, has been identified with modern Trikota Krauncha, which occurs only in the Taittiriya Āranyaka (1. 31. 2), has been identified with that part of the Kailāsa mountain on which Mānasa Sarovara is situated 2¹ Maināka is mentioned in the same text as a mountain in the Himālayas. Though not directly mentioned, Vindhya has been definitely alluded to in the Kaushitaki Upanshad by the term "southern mountain."

Turning to the rivers, the most striking fact is the disappearance of the Sarasvati. The place where the river vanished in the desert was known as Vınasana (Patiala District), and it reappeared at Plaksha Prāsravana at a distance of forty-four days' journey from Vinasana.

Naturally enough, the rivers further to the east find a prominent mention in this period. Revā, the name of the Narmadā which occurs only in post-Vedic literature, is traced by Weber in the word Revottaras found in the Satapatha Brāhmana, but the interpretation is doubtful. The Sadānīrā has been mentioned in the Satapatha Brāhmana (I. 1. 1. 14 ff) as the boundary between the Kosalas and Videhas. Some lexicographers have identified it with the Karatoyā, but according to the Vedic Index. It is too far east Weber and Eggeling identify it with the Gandak, and Pargiter with the Rāpti. Though the Mahāhārata (Cr. Ed. II. 18. 27), by placing the Sadānīrā between the Gandak and Sarayu, distinguishes between the Sadānīrā and Gandak, the Vedic Index pronounces the identification of the two as "probably correct." 22

The later Vedic texts mention various place-names which can be identified with reasonable certainty. Parichakrā, mentioned in the Satopatha Brāhmaṇa (XIII. 5. 4. 7) as the name of a Pańchāla town where king Kraivya Pańchāla performed his horse-sacrifice, has been identified by Weber with the later Ekachakrā which was near Kāmpila Asandīvat is the title of the capital of Janamejaya Pařikshita where the horse for his famous Advamedha was bound

(Sat. Br., XIII. 5. 4. 2; Ait Br, VIII. 21) It was apparently in the Kurukshetra. It was probably identical with Nagasahvaya (Hastināpura) which was abandoned by Nichakshu, a descendant of Parikshit, on its being washed away by the Ganges, and the capital was removed to Kauśāmbī.23 Kāmpīla, found in the Satapatha Brahmana, has been identified with modern Kampil on the old Ganges between Budaun and Farrukhābād. Naimisha forest. mentioned as being clearly of special sanctity, has been identified with Nimsar at a short distance from the Nimsar station of the Oudh and Rohilkhand Railway. The Taittiriua Aranyaka (V. 1. 1) mentions the Manus as the Utkara (heap) of Kurukshetra. This can be identified with the later Marusthala (Maru deserts) as it stood in the relation of Utkara to the sacred altar Kurukshetra. The existence of Kauśāmbī which plays an important part in the life of king Udayana Vatsarāja can be inferred from the word Kauśāmbeva in the Satapatha Brāhmana (XII. 2, 2, 13). The town has been identified with modern Kosam on the Yamuna.

The later Vedic literature refers to the three broad divisions—
Brahmāvarta or Aryāvarta, Madhyadeśa, and Dakshiṇāpatha. There is also a five-fold division with the enumeration of the residents therein which we come across for the first time in the Aitarcya Brāhmama (VIII. 14), though it has, in a way, been anticipated by the Atharvaveda (XIX. 17. 1. 9). The Aitarcya Brāhmaṇa divides the whole country into five parts, viz. 1. Dhruvā Madhyamā Pratishṭhā du or Madhyadeśa or middle country, 2. Prāchidiś or the eastern quarter, 3. Dakshinādiś or the southern quarter, 4
Pratichidiś or the western quarter, and 5. Udichidiś or the northern quarter. The extent and limits of these divisions cannot be defined with any degree of plausibility.

2 The Tribes

The status, formation, and nomenclature of the various tribes mentioned in the Ruyveda underwent considerable changes during the period under review. Many of the old tribes disappear, pale into insignificance, are merged into others, or are known under new names, and many fresh tribes rise into prominence. The five premier tribes of the Punjab, the Pürus, Anus, Druhyus, Yadus, and Turvasas recede into the background. The Pürus, as already indicated, have along with the Bharatas amalgamated with the Kurus who occupy the territory these two tribes held, and along with their allies, the Pañchálas, are the pre-eminent people in the period. The Bharatas as a tribe disappear, but the fame of their kings is not lost to the texts of this period. Bharata Dauhshanti and Sătrājita are mentioned as famous kings and performers of the Aśvamedha, and Bharata knuss are sooken of as winning victories over

the Kāśis and Sātvants and as performing sacrifices on the Gangā and the Yamunā.

The Kurus along with Pańchālas, Vaśas and Uśinaras occupied the Madhyadeśa. The Kurus do not appear as a people in the Rigueda, but Kuru forms part of the name of a king, Kuruśravaņa, mentioned therein. The Atharvaveda (XX. 127. 7-10) speaks of the Kuru king Parikshit in whose reign the Kuru king-dom flourished exceedingly. Reference is made to his desendant Janamejaya who performed an Aśvamedha at Asandivat, probably Hastināpura of later days. The Kuru kingdom roughly corresponded to modern Thänesar, Delhi, and the Upper Gangetic Došb.²⁴

The Pańchālas, the close allies of the Kurus as indicated by their joint name, were also a composite tribe. The name does not appear in the Rigneda, but the Satapatha Brahmaya states that the older name for the Pańchālas was Krivi which is found in the Rigneda. Weber and Geldner suggest that the Pańchālas represent the five tribes of the Rigneda; but this is not very probable according to the authors of the Vedic Index. So

We hear very little of the Pañchālas alone apart from the Kurus. Their kings Kraivya and Soņa Sātrāsāha are spoken of as having performed the Aśvamedha, and another king Durmukha is said to have conquered the whole earth. One of their kings Pravāhaṇa Jaivali appears as a philosopher king in the Upanishads

The Vedic texts do not know of north Pañchāla and south Pañchāla which we come across in the Mahābhārata and the Purāpas; evidently the Pañchālas had extended their country by conquests in post-Vedic times. The territory of the Pañchālas roughly corresponded to the Bareilly, Budaun, Farrukhābād, and adjoining districts of the United Provinces.²⁶

The Kuru-Pañchālas are the people par excellence in the Brāhmaṇa period, and they are referred to as a united nation. At one
time the Kuru-Pañchālas are said to have had one king. The mode
of sacrifice of the Kuru-Pañchālas is spoken of as the best, and thele
Brāhmaṇas gained eminence and fame in the period of the Upanishads. The Kuru-Pañchāla kings, the models for others, performed
Rājasūyas and set out on their victorious raids in autumn and returned in summer. Speech is said to have been best spoken there, and
the Sainhitās and Brāhmaṇas seem to have taken their definite form
among the Kuru-Pañchālas.

We have seen that the Sriñjayas were closely allied with the Tritsus in the Rigvedic age. The Satapatha Brähmana (II. 4. 4. 5) supports this view by stating that the Kurus (who were the successors of the Tritsus, Bharatas, and Pürus in post-Rigvedic age) and the Sriñjayas had one Purohita. The Satapatha Brähmana (XII. 9.3.1 ff.) further refers to a historical incident relating to this clan. The Yajurveda Sanhitäs refer to the Sriñjayas having

suffered some serious loss due to some ritual error, though what exactly befell them is not mentioned.

Vitahavya, mentioned in the Rigorda (VI. 15. 2, 3) along with Bharadvāja and as a contemporary of Sudās, may have been a king of the Sṛnājayas. In the Atharoaveda (VI. 137. 1), he appears as connected with Jamadagnı and Asıta; but this legend has probably little value. The Vitahavyas are said to have come to ruin because they devoured a Brāhmana s cow (AV. V. 18. 10-11; 19. 1)

Vasas and Ušinaras, as stated earlier, were dwelling in the middle country with the Kuru-Pañchālas. The Gopatha Brāhmaya which speaks of the Vasas and Ušinaras as united (I. 2. 9) regards them as northerners (II. 9). These Ušinaras according to Weber were the forefathers of the later Kāsis and Videhas.²⁷ The Kaushitak: Upanishad (IV. 1) connects the Vasas also with the Matsyas. The country of the Vasas, who later came to be known as Vatasa, was situated round about Kausāmbi, their capital.

The Sibis were intimately associated with the Ušinaras. The Antareya Brāhmaṇa (VIII. 23. 10) refers to Amitratāpana, a king of the Sibis. Rigveda X. 179 has been ascribed by the Anukramaṇi to Sibi Aušinara. Sivapura, which has been identified with Sibipura mentioned in a Shorkot inscription, 4e is referred to by Patanjali (IV. 2. 2) as situated in the northern country. The Sibis inhabited the Shorkot region in Jhang in the Punjab lying between the Irāvatī and the Chandrabhāgā.

Matsyas appear in connection with the Vasas in the Kaushi-taki Upanishad and with the Sālvas in the Gopatha Brāhmaṇa (I. 2. 9). Their king Dhvasan Dvaitavana, who performed the sacrifice at the lake Dvaitavana, is included in the list of Aśvamedhins in the Satapatha Brāhmaṇa (XIII. 5.4.9). According to the Manusmṛiti (II. 19; VII. 193) the Matsyas were included in the Brahmarshideśa.

The Sālvas are mentioned in the Satapatha Brāhmaṇa (A. 1. 10). The Mantrapāṭha indicates their location near the Yamunā, and it is not likely that they were in the north-west in Vedic times. The epic associates the Sālvas with the Kuru-Paāchālas, and they occupied probably what is now the modern Alwar state.

The name Ikshvāku occurs but once in the Rapveda (X. 60. 4) where it denotes a prince. The Satapatha Brāhmaṇa knows Purukutsa as Aikshvāka (XIII. 5. 4. 5), so that some scholars take the Ikshvāku line to have originally been a line of princes of the Kurus, who were on the Sarasvatī in the Vedic period, whereas Ikshvāku is connected with Ayodhyā and the eastern peoples.

Kosala and Videha do not appear in the earlier Vedic literature, being first mentioned in the Satapatha Brāhmana (I. 4. 1 10 ff.) which relates the story of the spread of the Aryan culture Videgha

Māthava, the king of the Videhas, accompanied by his præst Gotama Rāhūgana, is spoken of as carrying the sacrificial fite from the bank of the Sarasvati over Kosala (Oudh) eastwards across the Sadānīrā, and as establishing a settlement which was known as Videha (Tirhut) after the tribal name of Māthava. The story preserves the tradition that the Videhas received their culture from the west, that Kosala was Brahmanized before Videha, that the country as far as the Sadānīrā was conquered in one sweep, and that the progress was checked for a while after which Videha was founded across the river. The later division of Kosala into the northern and southern is not known to the Vedic literature.

Para-Atpāra-Hairanyanābha, the Kosala king, is spoken of as the performer of an Aśvamedha (Sat. Br., XIII. 5. 4 4). The close connection between the Kosalas, Videhas, and Kāšis is indicated by the fact that the three had the same Purohita acting for them (Sānkh. Sr. S. XVI. 29. 5). It appears, however, that the Kosala-Videhas were allied tribes and that there was some difference and rivalry between these and the Kuru-Pañ-chālas. The Brahmanism was not as strong in Kosala as among the Kuru-Pañchālas. The Videhas rose into emmence later through their philosopher king Janaka who was a leading patron of the Upanishadic doctrines.

Käši, along with Kosala and Videha, came into prominence only in later Vedic age. The Käšis and Videhas were closely connected on account of their proximity, and Weber suggests that these two together constituted the Ušinaras. This, however, cannot be accepted, as the Ušinaras dwelt in the middle country. Käši and Kosala are also found together. There is the story of the defeat of Dhritarāshtra, king of Käšis, by Satānika Sātājita, a Bharata king, resulting in the giving up of the kindling of the sacred fire down to the time of the Satapatha Brāhmana (XIII. 5.4.19). The relations of these eastern people with the Kuru-Pañchālas appear to have been anything but friendly. Political conflict and cultural difference are said to be the probable causes of the rivalry between the two sets.

Still farther off from the old centre of Vedic culture were the Magadhas who make their appearance only in later Vedic literature, and are regarded throughout as of little importance. Magadha corresponds roughly to southern Bihār. The name occurs for the first time in the Atharvaveda (V. 22.14), where a wish is expressed that the fever may visit the Gandhāris, the Mijavants, the Angas and the Magadhas, the first two being northern people and the latter, people of the east. In the Vrātya hymn (AV. X. 2.14) Māgadhas are associated with the Vrātyas. The Yajurveda includes Māgadha in the list of victims at Purushamedha. Zimmer rogards Māgadha referred to in the Atharvaveda and Yajurveda as a member of the mixed caste born of a Vaisya and Kshatriya. But the fact

that the Sütras and the Aitareya Aranyaka mention Magadha as a country shows that in the period of the Yajurveda and Atharvaveda, Māgadha meant a resident of the country and not a member of the mixed caste—an outcaste born of Pratiloma marriage. The authors of the Vedic Index account for the fact of Māgadha being a minstrel in later days by assuming Magadha as the home of minstrels, bards from which visited more western lands. This class has been taken by later Smriti texts as belonging to a separate caste, inventing a story of the inter-marriage of castes for their origin. The dislike of the Magadhas, which may go back to the times of the Rigoeda, was probably due to their not being wholly Brahmanized.

The Angas, unknown to the Rigneda, are mentioned in the Atharvaveda (V. 22) as noted above. There is nothing in the Vedic texts to indicate their location beyond the fact that they were people of the east; but as in later times their settlements were on the rivers Son and the Ganges, it may be presumed that their earliest seat also was in the same region. They have been associated with the Magadhas in some texts. There is no evidence in Vedic literature for Pargiter's view that the Angas and Magadhas were non-Aryan peoples that came overseas to eastern India.³¹ Oldenberg, however, thinks that these tribes were the earlier Aryan immigrants. Confirmation for this may be found in the Puranic evidence which speaks of the Ikshväkus and Videhas being of the same stock and as inhabiting the country since Rigvedic times.

The Māgadha is brought into close connection with the Vrātya in the mystical hymn of the Atharoaveda where he is celebrated as type of the supreme power in the universe. The Yajuroeda includes the Vrātya in the list of victims at Purushamedha (human sacrifice). The Vrātyas were regarded as outcastes, and the Atharoaveda, Paūchavinisā Brāhmata, and the Sūtras describe a certain rite intended to secure for them admission into the Brāhmana fold. The Vrātyas were a nomadic tribe (Vrāta) and neither studied the Vedas, nor ploughed the land, nor traded. Their nomad life is further suggested by their going about in rough wagons, with herds of goats, wearing turbans and wielding a particular kind of bow.

Because the later Dharmasūtras describe the Vrātya as an outsider, a man of mixed origin and of peculiar dress and habits, Roth, Whitney, Bloomfield, Chanda, and others regard the Vrātya as non-Aryan. The early Vedic texts do not support this view. The Vrātyas, though unintiated, spoke the speech of the initiated Their speech, though Aryan, had apparently resembled Prakrit rather than Vedic Sankrit, as they softened hard consonants. The Sūtras mention urbants and yaudhas among the Vrātyas, corresponding respectively to Brāhmaņas and Kshatriyas in the Brahmanical hierarchy. These particulars, coupled with the fact that they were

allowed to become members of the Brähmana community by performing a specific ritual, evidently show that the Vrätyas were not non-Aryans but were Aryans outside the sphere of Brähmana culture.

Their location cannot be indicated with certainty. Their life and habits would suggest them to be nomadic western tribes beyond the Sarsavati. There are, however, certain indications in the Sutras which definitely connect the Vrātyas with the Māgadha so that the conclusion that some Vrātyas were dwellers in Magadha is irresistible.

Vanga, from which Bengal proper receives its designation, is not found in early Vedic literature The Attareya Aranyaka (II.1.1) mentions Vangas, Vagadhas, and Cheras as birds, which probably means that they were non-Aryans speaking languages not intelligible to the Aryans. Vagadha in the text appears to be a misreading for Magadha, as both were neighbours Vangas were residents of Vanga or Eastern Bengal. The name also occurs in the Baudhäyana Dharma-sütra.

The tribes mentioned above occupied the first two of the five divisions, viz the Middle and Eastern regions, mentioned in the Aitareya Brāhmana. In the Dakshinadis, or the Southern region, Satvants alone are mentioned in the Aitareya Brāhmana. But besides them there were Vidarbhas, Nishadhas, and Kuntis.

The Satvants have been mentioned as the name of a people belonging to the south who were the subjects of the Bhoja kings. These people were subjected to regular raids by the Bharatas, and the Satapatha Brāhmana (XIII. 5 4.21) refers to the defeat of the Satvants by king Bharata who took away their horse prepared for the Aśvamedha. The Satapatha Brāhmana (VIII. 5.4.11)) further indicates that these Satvants lived near Bharata's kingdom, i.e. near the Gangā and Yamunā. They seem to have moved farther south by the time of the Aitareya Brāhmana which places them in the southern region beyond the Madhyadeśa, probably beyond the river Chambai (Charmapavatii).³² The Purāṇas corroborate the close relation of the Bhojas and Satvants who have been spoken of as the offshoots of the Yadu family.

Vidarbha is known through its king Bhīma, mentioned in the altareya Brdhman (VII. 34) as having received instruction about the substitute for the Soma from Parvata and Nărada. The Vidarbha kingdom was said to be famous for its special breed of hounds, which killed tigers (Jaim Up. Brā. II. 440). Vidarbha, as is well known, corresponds to modern Berär. Lassen places Vidarbha along the Sătpură hills to the north-west of Berär. 37 The Upanishads refer to Bhārgava, a sage of Vidarbha, as a contemporary of Āśvaliyana and to Vaidarbhi Koundinya. Kuṇḍina, the capital of Vidarbha, has been identified with the modern Kauṇḍinyapura on the bank of the Wardhā in the Chāndur tātuk of Amraoti.

The Satapatha Bröhmana (III. 3.2.1, 2) mentions the term Nasiahidha as an epithet of Nada, a king of the south. The later form of the name is Naishadha. The Nishadhas, residents of the Nishadha country, were quite distinct from the Nishadhas with whom they are often confounded. "Nishadha' was a general term used for a non-Aryan tribe, whereas the Nishadhas, in all probability belonged to the Aryan fold. King Nala of Nishadha is a celebrated figure in the Mahābhārata and the Purāṇas. The location of the Nishadha country is not known with certainty, though it may be assumed to be continuous to Vidarbha.

Under the Pratichyas or Westerners come the Nichyas and Apāchyas, as also Bāhikas and Ambashthas. The Nichya occurs as the designation of certain tribes of the Punjab and Sind. Nothing is known about the Apāchyas. The Bāhikas are spoken of as people of the west of the Punjab in the Satapatha Brāhmaņa (I.7.3.8) which refers to their calling Agni by the name of Bhava, as distinct from the Prāchyas who called it Sarva. The Ambashthas, corresponding to the Abastanoi of Arrian, who were settled on the lower Asikni in Alexander's time, are referred to in the Aitareya Brāhmaṇa (VIII. 21). Their king is stated to have been consecrated with the Aindre Mahābhisheka. They were probably in the Punjab in Veduc times

Finally we come to the Udichyas or Northerners, among whom are the Uttarakurus, the Uttaramadras, Mūjavants, Mahāvrishas. Gandhāris, Bāhlikas, Kešins, Kekayas, and Kāmbojas.

The Udichya dialect was celebrated for its purity; hence Brāhmanas flocked to the north for purposes of study. The northern dialect resembled that of the Kuru-Pańchāla, and the superiority of the Brāhmanas of the north is indicated by the victory of one of their spokesmen over a Kuru-Pañchāla Brāhmana in a debate. The celebrity enjoyed by the north in academic matters is further corroborated by the fact that Taxila became a famous seat of learning, and classical Sanskrit was first developed in Kāshmir.⁵⁰

The Uttarakurus, along with the Uttaramadras, are located beyond the Himālayas. Though regarded as mythical in the epic and later literature, the Uttarakurus still appear as a historical people in the Aitareya Brāhmana (VIII. 23) which states that one Jānantapi Atyarāti was anxious to conquer the country of the Uttarakurus, called the land of the gods. Zimmer places the Uttarakurus in Kāshmir to the north of Kurukshetra, and probably they were an offshoot of the Kurus.

The Madra people were divided into two sections, the Uttara (Northern) Madras and the Southern Madras or the Madras proper. The Uttaramadras alone appear in early Vedic literature, and they dwelt, as already stated, beyond the Himilayas, probably in the land of Käshmir. The mention of Madragara Saungayani as an ancient Vedic teacher shows the Madras as experts in Vedic learning.

a fact which is confirmed by the Satapatha Brāhmane which states that sages of Northern India repaired to the Madra country to study the Vedas. The Brihadaranyaka Upanishad refers to Kāpya Pataāchala as living among the Madras. The territory of the Southern Madras roughly corresponds to Sialkot and its adjoining districts in the Central Punjab which were known as the Madradesa as late as the time of Guru Govind Singh.³⁶ In Buddhist times the Madras dwelt between the Chenāb and Rāvi.

The Müjavants have been mentioned in the Atharvaveda along with the Mahāvrishas, Gandhāris, and Bāhlikas as dwelling far away and to whom fever is to be relegated. The Yajurveda also speaks of the Müjavants as a distant people. If the people took their name from Müjavant, a mountain in the Himālayas, which seems to be quite likely, they were a hill-tribe in the Himālayas.

The Mahāvṛishas appear to be northerners in the vicinity of the other tribes along with whom they are mentioned, though their exact location cannot be ascertained. The Chhāndogya Upanishad places king Raikva-parna in the Mahāvṛisha country, and the Jamnniya Upanishad Brāhmana mentions Hṛitsvāsaya as the king of the Mahāvṛisha

The Gandhäris, referred to in the Rigueda, are mentioned also in the Atharoaceda (as already stated) and in the Srauta Sūtras. They appear apparently as a despised people in the Atharoaceda. In later times, however, the angle of vision of the people of the Madhyadeás changed, and Gandhära became the famous resort of scholars for instruction in the Vedas and Vidyās. The Attareya Parhamana (VII. 34) mentions Nagnajit, a king of Gandhära, among Vedic teachers who propagated the Soma cult, which shows that Gandhära was not excluded from Vedic Aryans. From the various references to Gandhära in Indian literature it appears that the boundaries of the country varied at different periods in its history.

The Bählikas, mentioned along with the three foregoing peoples, were a contiguous northern tribe, their name also suggesting "the outsiders." Roth and Weber were inclined to place this tribe in Irān, but there is no need to assume any Irānian influence, for we find that Bählika is the name of a Kuru prince (Sat. Br., KII. 9.3.3). 33.37

Kešin is the name of a tribe found in the Satapatha Brāhmaņa (XI. 8. 4. 6) where their king is said to be studying how to avert a bad omen at the sacrifices. They were probably a branch of the Pańchālas.³⁸

The Sataputha Brähmana (X. 6. I. 2) and the Chhändogya Upanishad (V. 11. 4) mention Aśvapati, king of the Kekayas, sz a man of learning who instructed a number of Brähmanas. The Kekayas in later days were settled in the north-west between the

Sindhu and the Vitastā, and probably occupied the same territory in the Vedic age. According to the Puranic tradition the Kekayas were descended from Anu,⁵⁰ which is confirmed by the fact that the Anus of the Rigoeda dwelt in the same territory in which we find the Kekayas.

The earliest mention of Kāmboja occurs in the Vainéa Brāhmaya of the Sāmaveda where a teacher Kāmboja Aupamanyava is referred to. The sage Upamanyu, mentioned in the Rigueda (I. 102. 9), is in all probability the father of this Kāmboja teacher. From the fact that Kāmboja Aupamanyava is stated to be a pupil of Madragāra, Zimmer infers that the Kāmbojas and the Madras were close neighbours in north-western India. The speech of the Kāmbojas is referred to by Yāska as differing from other Aryans, and Grierson sees in this reference the Irānan affinities of the Kāmbojas; out the fact that Kāmboja teachers were reputed for their Vedic learning shows them to have been Vedic Aryans, so that Kāmboja was an Aryan settlement. Later on Kāmbojas settled to the north-west of the Indus, and were the Kambujiyas of the old Persaan inscriptions.

There is some difference of opinion as to the location of the Kämbojas. Rhys Davids places them to the extreme north-west of India, S. K. Aiyangar and P. N. Banerji in a country near Sind, Raychaudhuri in the Rāwalpindi and Peshāwar districts. Smith along the mountains of Tibet or Hindu Kush, and Eliot in Tibet or its border. 1 The latest attempt at locating the Kämbojas is by Jayachandra who, after discussing the problems afresh, identifies Kāmboja with Badakhshān and the Pāmirs, and Motichandra has further supported the identification. 2

There are various other minor tribes mentioned in Vedic texts, but we know very little of them.⁴³

Finally, we come to the semi-Aryan, non-Aryan and barbarous tribes. The Aitareya Brāhmana mentioned the Andhras, Pundras, Sabaras, Pulindas and Mūtibas as being Dasyus, i.e. outcastes living on the borders of the Aryan settlements. These people are said to be born of the fifty eldest sons of Viśvānirathrough their father's curse on their refusal to accept the adoption of Sunaḥsepa. They were thus outside the Aryan fold. The Andhras, Sabaras and Pulindas are known from the Mahābhārata to have been tribes of the Deccan.

The Andhras originally lived between the Krishnā and the Godāvarī.⁴⁴ Andhras in modern times are the Telugu-speaking people of the Deccan.

The Pundras, whose name occurs also in the Sütras, have been located in Bengal and Bihār by the Mahābhārata. They were situated in North Bengal and gave their name to their capital

town Pundravardhana. The Pundras are probably the ancestors of the Puros, an aboriginal caste in Bengal.⁴⁵

The exact location of the Sabaras is not known. They can be identified with the Suari of Pliny and the Sabarae of Ptolemy and are probably ancestors of the Savaralu or Sauras of the Vizagapatam hills, the Savaris of the Gwalior territory and the savages on the frontiers of Orissa.⁴⁰

The name of Pulindas does not appear in the parallel list given in the Sāikhāiyana Srauta-Sūtra. They are found along with the Andhras at the time of Asoka. Their capital, according to the Mahābhārata, probably lay to the south-east of the Bhilsa region.

The territory of the Mütibas has not yet been located. Raychaudhuri thinks it not altogether improbable that the Müchpas, a variant of Mütibas, are the people who appear in the Märkandeya Purāna under the designation of Mushika, and locates the latter on the benks of the river Musi on which Hyderabhad now stands.⁴⁷

The name Mlechchha, found in the Śatapatha Brāhmana, is used in the sense of a barbarian in speech who uses "he'lavo" for "he'rayah" This shows that these barbarians were Aryan speakers who employed a Prākrit form of speech.

The Nishāda mentioned in the later Samhitās and Brāhmaņas apters to be, not the name of any particular tribe, but the generic term for non-Aryan tribes who were not under Aryan control. Nishādas have been distinguished from the other four Varṇas. Weber considered the Nishādas to be settled aborigines. The Smritis explain the Nishādas as the off-spring of a Brāhmana father and a Sūdra mother. The epics represent the Nishādas as having their settlements in the Vindhya and Sāṭpurā ranges, and it seems that during the post-lityredge period also they inhabited mountanous tracts

The Rigueda repeatedly refers to the attacks on the aborigines They are called Krishna-tvach (black skins) metaphorically. Kuya-väch (evil speaking), a demon slam by Indra, probably personifies the barbarian opponents. Mridhraväch (speaking insultingly) is also similarly used for denoting barbarians in the Rigueda If Balbūtha, called a Dāsa, were the son of an aboriginal mother or an aboriginal himself, his reference as giving gifts to the singer indicates the establishment of friendly relations between the Aryans and Dāsa.

The above review of the Aryan settlements would make it clear that the period of the later Samhitās, Brāhmaṇas, Upanishads, and Sūtras is characterized by a spirit of adventure and expansion, and the advancing Aryans were spreading in every direction, colonizing the east, south, and north. The Gangetic Doāb was completely occupied by the Aryans and the adventurous Bharatas and Videghas led expeditions along the Yamunā, the Sarasvatī, and the Sadānīrā owards the east Kosala, Videha, Magadha, and Anga came under Aryan occupation during this period. In the north and the north-

west, we come across the Uttarakurus and the Uttaramadras, Bāhlīkas, Mahāvrishas, and Mūjavants, showing the expansion along Kashmir and the Himalayas. Towards the south the Vindhya appears for the first time in the Kaushitaki Upanishad (II. 8). and the Kuntis and Vitahavyas seem to have penetrated further south, and the Narmada and Vidarbha also were within the Aryan fold

The disappearance of the Sarasvati referred to in the Panchavimsa Brāhmana (XXV. 10, 6) is an important geographical landmark in this period. The main centre of the life of the period is Kurukshetra in the country of the Kuru-Panchalas, bounded by the Khandava on the south, Turghna on the north, and Parinah on the west It is noteworthy that the sphere of civilization is gradually shifting eastward and its localization in the region to the east of the land of five rivers is an accomplished fact. The Punjab and the West not only recede in importance, but the tribes of the west are looked upon with disapproval in the Satapatha and Aitareva Brāhmanas. There has been a change and regrouping of tribes of the Rigvedic period, and many new tribes emerge during this period. The Bharatas do not occupy the premier position, but are merged in the Kurus who, with their allies the Panchalas, are the tribe par excellence. With Vasas and Usinaras, the Kuru Pañchālas occupy the Madhyadeśa The Uttarakurus and the Uttaramadras lay to the north beyond the Himālavas, and Satvats to the south To the east Kosala, Videha, Magadha, and Anga rise into prominence The Andhras, Pundras, Mūtibas, Pulindas, and Sabaras, as also the Nishādas, are the outcast tribes which were not fully Brahmanized.

The territory comprised within the sphere of Aryan influence down to the period of the Upanishads may thus be roughly described as the whole of India to the north of the Narmada, and some regions even to the south of that river.

GENERAL REFERENCES

MACDONELL, A A, and KEITH, A B · Vedsc Index Two vols. London, 1912 OLDENBERG, H: Buddha (Eng Translation by W Hoey) London, 1882 ZIMMER, H: Altindisches Leben Berlin, 1879

- 1 Hillebrandt (Ved Myth., I, pp 99 ff, III, pp. 372 ff.) thinks that it is Arghandab
- in a few places

 2. Macdonell, History of Sanskrit Literature, p. 142; Keith, CHI, I, p. 80.
- 3. AL, p 17, Chakladar, MR, Jan 1930, p. 41; Raychaudhuri, Ind. Antiquities, p 51. 4 Zur Litteratur und Geschichte des Weda, pp 138 ff; AL, pp. 11, 12; MR, Jan.
- 1800, p. 41.
 1800,

- For arguments against this view, cf. Ch. X, Appendix, p. 217.
 Cf. Ved. Ind., I, p. 468; CHI. I, p. 79 n. l. Hopkins, JAOS, 19; pp. 19-26; Kleith, CHI. I, p. 79, Winterrutz, HIL, I, p. 63; Pischel and Geldner, Ved. Stud., II, p. 238; III, p. 152.

14. RV. IV 42. 8, y and Sayana s Commentary.
15 The Ait. For takes the five to be gods, men, gandharvas, and apsarases, snakes, and the fathers, whereas Yaska thinks that gandharvas, fathers, gods, asuras, and rakshassa are meant. Aupamanyavas and Sayana hold that the four varias and the Nishādas made up the five Roth and Geldner take the expression to

indicate the people of the whole earth.

16 JAOS, 15, pp 258 ff

17. Cf. Dutt, Aryanisation of India, p 104

- Cf. Dutt, Aryanisation of India, p 104
 Baneri: Sastri, JBORS, 12, p. 23
 The Désas and Daytus have been fully discussed above in Ch VIII, p. 159.

19 See Ch XI, p Some Aspects of Ancient Indian Culture, p 34

21 Dey, GD, p 104 22 Ved Ind, II, p 422 23. Raychaudhuri, PHAI, p 20

- Ibid 25 Ved Ind , I, p 469 26 Raychaudhuri, PHAI, p 59
- 27
- Raychaudnur, FIAI, p 38 Ind Stud, I, pp 212-3 EI, 1921, p 16, Majumdar, CAG, p 669 Ind Stud, I, pp 212-3 Ved Ind II, p 117
- 31
- Ved Ind II, p 11.
 JRAS, 1908, p 852
 Raychaudhuri, PHAI, p 76
 Tribes, p 100 32

- 32 Cf Law, Tribes, p 100
 34 Raychaudhuri, PHAI, p 74
 35 Franke, Pati und Sanskrit, pp. 88, 89
 36 Raychaudhuri, PHAI, p 54
- Vählika and Välhika appear as variants of Bählika. The Mahābhārata and the Puranas locate the tribe in the neighbourhood of Gandhara and Punjab.
- 38 Bhandarkar identifies the Kesis with the Kassis or Kassites (Some Aspects of Ancient Indian Culture, p 3)
- Ancient Indian Cutture, p 3)
 39 Pargier, AIHT, pp 109, 264
 40 JRAS, 1911, pp 801-2
 41 Cf Law, Tribes, pp 2-3
 42 JUPHAS, XVI, pp 43-6
- 42 JUFIALS, AVI, pp 43-6 3 Such e g, are the Rušamas, Šviknas, Sparsus, Kāraskaras, Šaphālas, etc 42 ZDMG, 56, pp 687 ff 45 Bhandarar, ABORI, XII, pp 104, 105 46 Raychaudhuri, PHAI, p 79, Dutt, Arpenisation of India, p 69

- 47. PHAI, p 80.

BOOK FOUR HISTORICAL TRADITIONS

CHAPTER XIV

TRADITIONAL HISTORY FROM THE EARLIEST TIME TO THE ACCESSION OF PARIKSHIT

1. SOURCES OF INFORMATION

Our sources for the traditional history from the earliest times to the accession of Partishit are mainly the Purāpas, though the Mahābhārata and the Rāmāyana occasionally give dynastic lists and deal with traditional accounts. General observations on the Purāpas and the Epics will be found in the next volume. Here it is intended to give only a brief introductory note dealing with the historical value of the Purāpas.

The Puranas, in their present recension, can hardly be placed earlier than the Gupta period. Thus they received their final form more than 2,000 years after the earliest events related by them. Besides this distance in time, the traditional account, contained in the Puranas, is vitiated by exaggeration, mythological details, pronounced religious bias, and the divergences in the texts of the different Puranas. These have been subjected to various modifications, revisions, etc at different periods and no "definite" text of the Puranas is available. In spite of these obvious defects the Puranic account may not be regarded as wholly unreliable. It is likely that the royal genealogies and ancient ballads of kings and heroes were preserved from very early times by the Sūtas. It is expressly laid down in the Vāyu Purāņa (I. 31-2) that "the Sūta's special duty, as perceived by good men of old, was to preserve the genealogies of gods, rishts (sages), and most glorious kings, and the traditions of great men." These accounts probably formed the basis of the original Purana, from which the genealogical texts of the existing puranas were ultimately derived. Pargiter holds, on the basis of Indian tradition, that this original Purana was composed more or less about the same time when the Vedic texts received their final form.1 Although this view may be justly questioned, the existence of a Purana text at a very early age is not improbable.

In any case there is hardly any doubt that the royal generations in the Purapas embody many genuine historical traditions of great antiquity which have not been otherwise preserved. It has also been pointed out by Pargiter that the Puranic account is corroborated in many respects by Vedic texts, which contain contemporary historical data A comparative study of the Purapas and the Vedic texts shows that the former, though reduced to writing at a comparatively late period, embody the earliest traditional history, and much of their material is old and valuable.

When we find Puranic accounts corroborated by the Veduc evi dence, it is but legitimate to take their testimony as valid even in matters on which the Rigreda is silent.

That the kernel of both the Rāmāyara and the Mahābhārata embodies historical facts is also now generally accepted. 1a The epic details, embellishments, exaggerations and flights of fancy, evident in the Rāmāyara and the Mahābhārata, have been kept distinct from the Puranic account of traditional history in this chapter Besides their central story, the Rāmāyara and the Mahābhārata contain some dynastic hists and accounts. The Great Epic traelf implies that it was composed after the Purānas. The genealogical accounts in the Mahābhārata are peculiar in that they are partly in prose and partly in verse, and do not appear to be ancient. The Rāmāyara genealogy, but as the latter has been corroborated by other authorities, the Puranic genealogy is to be accepted in preference to that in the Rāmāyara.

2. CHRONOLOGICAL SCHEME OF TRADITIONAL HISTORY ACCORDING TO THE PURANAS

The Bhārata War is the central landmark in Indian traditional history, and the fixing of the date of that event will give us a starting point in settling dates of events occurring before and after it. We shall, therefore, first of all, try in brief to determine the date of the Bhārata War.

According to the Aihole inscription of Pullakeśin II (seventh entury A. D.) the Bhārata War took place in 3102 B.C., which is the starting point of the Kaliyuga era according to the astronomical tradition represented by Āryabhaṭa b. But Fleet has pointed out that the reckoning was not founded in Vedic times; it was first started about 3,500 years after the time for purposes of calculation, and was not known to astronomers before Āryabhaṭa ² Another school of Hindu astronomers and historians, represented by Vriddha-Garga, Varihamihira and Kalhana, places the Bhārata War 653 years after the Kaliyuga era, 1 e in 244 B C ³ These two schools thus present conflicting views, and as they are based on a hypothetical teckoning of a late date, we can hardly attach much importance to them.

Astronomical references in the Mahabhārata itself about the position of the Nakshatras and planets have been utilized for determining the date of the war. But, the same data have yielded various divergent results ⁴ As a matter of fact the statements in the Epic are conflicting and self-contradictory, so that in order to arrive at some conclusion it is necessary to reject certain statements or their implications as later interpolations or mere exaggerations. No satisfactory and acceptable result can be arrived at from these data

TRADITIONAL HISTORY FROM THE EARLIEST TIME

On the basis of the Puranıc tradition about the number of kings that flourished in different dynasties between king Adhismakṛshma (great-grandson of Janamejaya) and the coronation of Mahāpadma Nanda, Pargiter places the Bhārata War in c. 950 B.C. According to him 26 reigns intervened between these kings, and allowing a period of 18 years per reign, and taking the accession of Mahāpadma in 382 B.C., the period of Adhismakṛshma would be (26×18+382=) 550 B.C. And adding a hundred years for the reigns of intermediate kings between Yudhishthira and Adhismakṛshma Pargiter arrives at (850+100=) 950 B C. as the date of the Bhārata War.⁵

Pargiter's date is contradicted by the statement in the Purāṇas and the Mahābārata that between the birth of Parikshit and the coronation of Mahāpadma, there elapsed a period of 1,015 (or 1,050) years. This brings the date of the Bhārata War to (1015-482=-) 1397 B.C. Though the number of kings mentioned in the Purāṇas during this period does not appear to be correct, as it gives an abnormally high average regnal period per generation, the figure mentioning the period (viz. 1015 or 1050) seems to represent a fairly reliable tradition, especially as the date it gives for the Bhārata War (c 1400 B.C.) is corroborated by a consideration of the Vamśivali list of teachers. We may, therefore, take c. 1400 B.C. as the provisional date for the Bhārata War, and the event must have taken place botween this date and 1000 B.C. in round numbers.

Now working backwards from the earlier date, the age of Manu Vaivasvata, who flourished, according to the genealogies prepared on the basis of traditional accounts, 95 generations before the Bharata War, can be put as (95×18+1400=) 3110 B.C. taking one generation to average 18 years (as we have to deal with very long genealogies extending over 90 generations, we would be erring on the side of caution if we assumed 18 years as the average reign). This date, viz. 3110 B.C., curiously enough, approaches 3102 B.C. which has been taken as the beginning of the hypothetical Kali age for astronomical calculations There is no doubt that the date 3102 B.C. signifies some important and epoch-making event in the traditional history of India. If it denotes the period of the beginning of the rule by Manu Vaivasvata, that means that it stands for the date of the Great Flood recorded in the Satapatha Brahmana and other accounts, at which Manu was the saviour of humanity. The devastating Flood undoubtedly was the most important landmark in the history of the ancient world, and common flood legends suggest that the same event has been described in Indian, Hebrew, and Babylonian accounts. The Flood in Mesopotamia is generally held to have occurred about 3100 B.C.6a The Flood in India probably also occurred at the same time, and the date 3102 B.C., supposed

to be the beginning of the Kali era, may, therefore, commemorate this event.

The year 3102 B.C. thus represents the age of Manu, the first traditional king in India. Yayati, who is fifth in descent from Manu and figures also in the Rigveda, thus flourished (18×5=) 90 years after Manu or in (3100-90=) 3010 B.C. Mändhätri, coming after twenty generations, has to be placed in (3100-20×18=) 2740 B.C. The period of Arjuna Kārtavīrya, Viśvāmitra, Jamadagni, Paraśurāma, and Harischandra can be put between (3100-31×18)=) 2542 B.C., and (3100-33×18=) 2506 B.C. or roughly between 2550 and 2500 B.C. Sagara of Avodhvā and Dushvanta and Bharata of Hastinapura flourished between (3100-41×18=) 2362 B.C. and 3100-44 ×18=) 2308 B.C or roughly between 2350 and 2300 B.C. Rāma flourished 65 generations after Manu, i.e. in (3100-65×18=) 1930 B.C or roughly in 1950 B.C. and the famous Dāśarājňa war which occurred about three or four generations after Rāma, in c. 1900 B.C. These dates will, of course, have to be lowered by 400 years if the Bharata War is placed in c. 1000 B.C

3. PRE-FLOOD TRADITIONS AND THE DAWN OF HISTORY

Like the dynastic lists in Sumer and Egypt, the Indian lists also record pre-diluvian dynasties, though as may naturally be expected in such accounts, there is a large mixture of myths and legends. They begin with the mythical king, Manu Sväyambhuva, who is said to have been born of Brahmā, and had from Satartipā, the half-female form of his body, two sons, Priyavrata and Uttānapāda, and three daughters. These daughters are the themes of very elaborate legends which connect them with the gods, sages, sacrifices, etc. Sväyambhuva Manu, also known as Virāj, was the lord of the first Manu cycle.

The Vāyu Purāṇa mentions Ananda as a Brahmā (supreme ruler) who was a predecessor of Manu Svāyambhuva. This Ananda is said to have established the Varṇas (castes), formulated their duties, and also established the institution of marriage; but these fell into abeyance in a short time and were revived by Manu Svāyambhuva. Manu Svāyambhuva's capital lay on the bank of the river Sarasvati. He is said to have subdued all enemies and became the first king of the earth. Manu Svārochisha, the second Manu, was the son of Svāyambhuva's daughter Ākūti. Priyavrata, the eldest son of Manu Svāyambhuva, is said to be the first of the Kshatriyas. Three of his sons renounced the world in child-hood in order to perform penance, and became Manus in the next Manvantaras. These were Uttama, Tāmassa, and Raivata, respectively the third, fourth, and fifth Manus.

Uttānapāda, the second son of Svāyambhuva Manu, had three sons, Dhruva, Kīrtivat, and Uttama. The story of the celebrated

TRADITIONAL HISTORY FROM THE EARLIEST TIME

boy devotee Dhruya, who on account of the insult offered him by his step-mother, the favourite queen of Uttanapada, left the world for penance and secured boons from the Lord Vishou, is well-known to every devout Hindu. Dhruva was succeeded by Prachinagarbha. Chākshusha in this line was the sixth Manu. His grandson Vena was a very wicked and tyrannous king. There was a general rebellion against him and he was deposed and killed. His son Prithu, celebrated as the first consecrated king, from whom the earth received its name Prithvi, was enthroned his successor. He levelled the whole earth, clearing it of ups and downs, and encouraged cultivation, cattle-breeding, commerce, and building of cities and villages. The oath that he had to swear would compare favourably with the oath any constitutional sovereign of England has to take.8 Fifth in descent from Prithu was Daksha, whose daughter's grandson, Manu Vaivasvata, saved humanity from the deluge which occurred at this time.

4 THE FLOOD AND MANU VAIVASVATA (c. 3100 B.C.)

The earliest and the shortest Indian account describing the flood is found in the Satapatha Brahmana, and there are later embellished versions in the Mahabharata and the Puranas.9 According to the Satapatha Brahmana, when Manu was washing his hands in the morning, a small fish came into his hands along with the water. The fish sought protection from Manu, saying, "Rear me, I will save thee." The reason stated was that the small fish was liable to be devoured by the larger, and it required protection till it grew up. It asked to be kept in a jar, and later on, when it outgrew that, in a pond, and finally in the sea. Manu acted accordingly. The fish forewarned Manu of the forthcoming flood, and advised him to prepare a ship and enter into it when the flood came. The flood began to rise at the appointed hour, and Manu entered the ship. The fish then swam up to him; he tied the rope of the ship to its horn, and thus passed swiftly to the yonder northern mountain. There, Manu was directed to ascend the mountain after fastening the ship to a tree and disembark after the water had subsided. Accordingly, he gradually descended, and hence the slope of the northern mountain is called Manoravataranam or Manu's descent. The waters swept away all the three heavens, and Manu alone was saved.

Manu Vaivasvata is said to be the originator of the human race, and all the dynasties mentioned in the Purënas spring from him. He framed rules and laws of government, and collected a sixth of the produce of the land as a tax to meet administrative expenses.

Manu is stated to have been the father of nine valiant sons, besides the eldest, who is represented to have had a dual personality as the male IIa and female IIā. There is a great divergence in the

names of the nine sons and their order in the different accounts. According to the collated text, suggested by Pargiter. 10 the names are: Ikshvāku, Nābhāga, Dhrishta, Saryāti, Narishyanta, Prāmsu, Nābhāgodishta (or Nabhānedishtha), Karūsha, and Prishadhra. Of these sons only four are important as being the originators of important lines. Ikshväku, the eldest, had his capital at Ayodhya, and his son Vikukshi founded the Aikshväka (or the Solar) line. The location of the Näbhägas, descended from Näbhäga, is uncertain. They probably reigned in the midlands of the Gangetic Doab, and included Rathitara from whom came the Rathitaras who were Kshatrivan Brāhmanas. The Nābhāga dynasty played practically no part in traditional history, and probably disappeared under the early Aila conquests. From Dhrishta came the Dharshtaka Kshatriyas who probably ruled over Vähika in the Puniab. Nothing further is known about them Their social position is interesting to the student of social history as they are sometimes called Brahmanas. sometimes Kshatrivas and sometimes even Vaisvas, indicating the fluidity of castes at this period in our history. Saryati was the founder of the Sarvatas who ruled in Anarta. The Sarvatas were one of the earliest Aryan tribes to come in contact with Gujarāt, which received its ancient name from Anarta, the son of Saryāti. There is much confusion about the genealogy of Narishvanta, some accounts stating the Sakas to be his descendants. Nothing is known about the descendants of Prāmsu. Nābhāgodishta settled in north Bihār, and established the Vaiśāla dynasty which ruled at Vaiśālī identified with Basarh¹¹ (Muzaffarpur district). From Karusha came the Karūshas, the determined fighters, who occupied the Karūsha country-the region round the modern Rewah and eastwards to the river Son. Prishadhra was excluded from any share of the earth because he killed his auru's (preceptor's) cow.

From Ilā, as the female, who married Budha, was born Puriravas, the originator of the Alla (or the Lunar) dynasty. From the Allas sprang various dynasties such as the Kānyakubjas, Yādavas (Haihayas, Andhakas, Vṛishṇis), Turvasus, Druhyus, Ānavas, Pañchālas, Bārhadrathas, Chedis, etc.

From liä transformed into a Kumpurusha named Sudyumna, prang the Saudyumnas—his three sons Utkala, Gaya, and Vinatäsva, who respectively ruled over the Utkala country, Cayā, and the eastern regions including the northern Kurus. The Saudyumna kingdoms were annexed by the Ānavas and Kānyakubjas.

The early disappearance of the dynastic lists of the kingdoms established by Karusha, Nahhāga, Dhrishta, Narishyanta, Prāmśu, and Prishedhra seems to be due to the victorious campaigns led by Purūravas, Nahusha and Yayāti of the Lunar dynasty, who displacced all these kingdoms and excanded the Paurava resim.

TRADITIONAL HISTORY FROM THE EARLIEST TIME

5. THE YAYATI PERIOD (c. 3000-2750 B.C.)

1. The Lunar Dynasty

Purūravas Aila, Ila's son through Budha or Soma, was the progenitor of the celebrated Lunar dynasty. Though the seat of the government of the Ailas and the scene of their later activities have been placed at Pratishthāna¹² by the Purāṇas, the origin of the Ailas, according to these texts, seems to be connected with the Himālayan region.

Pururavas is said to have ruled over the seven islands and performed a hundred Aśvamedhas. The story of Pururavas and Urvaśi is too well known to be dealt with here. 22 However, towards the end of his reign, Pururavas is said have been intoxicated with power and declared war on the Brāhmaşas, robbed them of their jewels, and coveted the golden sacrificial floor of the Namisha sages, who were performing sacrifice. The sages in revolt killed him and installed his eldest son Ayu on the throne. Pururavas was the contemporary of Ikshváku of the Solar dynasty. The Aila kingdom developed quickly under Pururavas. Being checked in their expansion to the north by the powerful kingdom of Ayodhyā and to the south by the war-like Karūshas, the Ailas extended their sway eastward and north-westward into the Gangetic Došb and Mālwā and Eastern Rājputāna. The expanded realm was divided among Pururava's two sons, Ayu and Amāvasu.

Ayu continued the main line at Pratishţhāna, and Amāvasu, to whose share fell the northern territories in the mid-Gangetic Doāb, founded the Kānyakubja dynasty. Ayu was friendly towards the Rishis and Brāhmaṇas. His marriage with Prabhā, the daughter of a Dānava king Svarbhānu, indicates that he held catholic views and was a conciliator between Aryas and Dānavas. Ayu had five sons, only two of whom were important. The eldest, Nahusha, succeeded Ayu in the main line at Pratishthāna, while the second, Khshatraviddha, established himself at Kāšī in the east.

Nahusha was a famous king, a great conqueror, the first man to establish a theatre on the earth. The Mahābhārata story of his securing the kingdom of Indra, and of his subsequent fall therefrom on account of his arrogance and ill-treatment of Agastya, runs counter to many well-established synchronisms and is obviously a later invention. ¹³ His son and successor Yayāti is mentioned in the Purāṇas and the Mahābhārata as a Samrāṭ (emperor) and a great conqueror who extended his kingdom far and wide. He reduced all Madhyadēsa west of Ayodhyā and Kānyakubja and north-west as far as the Sarasvati. He also brought under his sway countries towards the south, south-east, and west of his territory. The Purāṇas and the Mahābhārata give a detailed account of Yayāti's marriage with

Devayāni, daughter of Ušanas-Sukra, the great Bhārgava rulu, and Sarmıshthā, daughter of king Vrishaparvan of the Asuras. Yayāti's marriage with Devayāni being the pratitoma marriage, reprehensible according to later customary law, some excuses have been invented in justification of it.

Yayāti had five sons. Devayāni bore two, Yadu and Turvasu, and Sarmishhā three, Anu, Druhyu, and Pūru. Yayāti divided the kingdom among his five sons, placing the youngest son Pūru to continue the main line, ruling over Madhyadeša, the southern half of the Ganges-Juman Doāb, with its capital at Pratushhāna. The main Lunar line hereafter came to be known as Pūru Vamša or the Pauravas after Pūru. There is a great divergence in the Purāṇas regarding the territories assigned by Yayātı to his sons. Parguter's collated text's suggests that Yadu, the eldest son, was given territories towards the south-west embracing the country watered by the rivers Charmaquati (Chambal), Vetravati (Betwa) and Suktinati (Ken). Turvasu got the south-east territory (round Rewah) To Druhyu was assigned the west, i.e. the country west of the Yamunā and north of the Chambal. Anu received the north, i.e. the northern portion of the Ganges-Juman Doāb.

By the time of Pūru, the Ailas had thus established seven kingdoms,, viz. Pratishthāna, Yādava, Turvasu, Anava, Druhyu (i.e. the kingdoms of the five sons of Yayāti), and the kingdoms of Kānyakubja and Kāšī Pūru, though the youngest, got the ancestral kingdom of Pratishthāna through obedience to his father. He was succeeded by his son Janameiava.

The Kānyakubijas and Kāśis, the subsections of the Lunar dynasty, are not noted for any remarkable achievements or personalities during the period under review. Yadu, the eldest son of Yayāti, founded the Yādavas, the first Lunar dynasty to rise into prominence. They first destroyed the Rākshasa power in Gujarāt-Kāthiāwār, who overthrew the Sāryātas there. Only Kroshţri and Sahasrajti, among Yadu's sons, are important, for with them the Yādavas branched off respectively into the Yādavas and Hahayas.

Yādava Chitraratha, about welfth in descent from Yadu, was contemporary of the Paurava king Matināra. Gaurī, the daughter of Matināra, was married to Yuvanāšva II of the Solar dynasty of Ayodhyā, and their son Māndhātri, king of Ayodhyā, married Bindumati, the daughter of Sasabindu, son of Chitraratha and Sasabindu were great kings. The Yādavas first developed a great kingdom under Sasabindhu, which included the territories of the Pauravas and Turvasus on the east and the Druhyus on the north

2. The Solar Dynasty

Now we turn to the Solar dynasty which comprises the three

TRADITIONAL HISTORY FROM THE EARLIEST TIME

lines of Ayodhyā, Videha, and Vaiśāla, and the Śāryātas. These are the only branches that are important out of the lines produced by the nine sons of Manu.

lkshväku, the eldest of Manu's sons, was the first king of Ayodhyā, and Manu gave hım Madhyadeša. According to the Puršpas, Ikshväku had a hundred sons of whom Vikukshi the eldest, Nimi and Dapda were most famous. Vikukshi, also named Sašāda, succeeded Ikshväku in the Ayodhyā kingdom, and Nimi founded the Videha line. The Dapdaka forest is saud to have been named after Danda or Daodaka, the third son of Ikshväku.

Paranjaya or Puranjaya, the son of Vikukshi, received the appellation Kakutstha on account of his being borne away by Indra. in the form of a bull, on his head (kakud) on the battlefield. Sravasta, the son of Yuvanāśva and sixth in descent from Kakutstha, is said to have founded Sravasti 15 which later became the capital of north Kosala. Of his grandson Kuvalāśva, a wild legend is current explaining how he received the alternative name Dhundhumara. Kuvalāśva is said to have marched against an Asura, Rākshasa or Daitya named Dhundhu near a shallow sand-filled sea in the Raiputana desert in order to rescue a sage named Uttanka. He destroved the subterranean quarters of the Asura and put an end to his fiery home. This legend probably suggests that Kuvalāśva subjugated the Asuras and aborngmals to the west and in the southern parts of Raiputana and spread Arvan culture in those lands. Dr. Law sees a reference to a natural phenomenon in this legend. He consectures that the subterranean retreat of the Asura was really a small volcanic pit near the western sea-coast causing occasional earthquakes, and emitting smoke, ashes, and fire. Kuvalāśva, by digging up the earth, first brought on volcanic eruptions destroying the army in flames and smoke: but later on a subterranean water channel rushed into the volcanic pit and extinguished it for ever. 16 According to Pargiter this legend alludes to a shallow sand-filled sea in Raiputana which formed the limit of Arvan advance towards the south 17. Kuvalāśva's eighth descendant was Yuvanāśva II, also known as Saudyumni. A grotesque legend is told about the birth of a son to the king himself out of his left rib as a result of his drinking the holy sacrificial water intended for his queen. The child was nursed by Indra with the nectar exhaled from his thumb, whence it came to be known as Mandhatri.

The other branches of the Solar dynasty may be briefly referred to. The Videhas sprang from Ikshväku's son Nimi, also known as Videha. Nimi dwelt in a town named Jayanta and the capital was Mithilä, said to have been named after his son Mithi. The Videha line of kings came to be known as Janakas on account of this Mithi Janaka.

The Vaisalas, though descended from Nabhanedishtha (or Dhri-

shta, son of Nābhāga and grandson of Manu), came to be called such retrospectively from the name of king Viśāla who founded Viśālā or Vaiśāli as his capital. Bhalandana and Vatsaprī are named as the first two kings. Bhalandana, who was a great sacrificer and a valiant and universal conqueror, is said to have become a Vaiśva.

The Sāryātas originated from Saryāti, the son of Manu, and played but an unimportant rôle in traditional history. Saryāti, who is saul to have offered his daughter Sukanyā in marriage to Chyavana of the Bhrigu family, was succeeded by his son Ānarta. The Sāryāta dynasty was short-lived and was destroyed by the Punyajana Rākshasas. The history of the Saudyumnas has been referred to above (p. 278).

Brāhmaņa famīlies

Brāhmana families also play important rôles in traditional history, and we may take note of contemporary Brahmana families in the different periods of traditional history. The Brahmana families claim descent from eight mythical rishis (sages), called mind-born sons of Brahma. There are also other fabulous accounts which seek to explain their names on the basis of etymology inventing fanciful stories. Out of the eight Brähmana families, 1.e. Bhrigu, Angiras, Marichi, Atri, Vasishtha, Pulastva, Pulaha, and Kratu, the last three did not produce true Brâhmaņa stocks. Pulastya was the progenitor of the Rakshasas, Vanaras, Kinnaras and Yakshas From Pulaha came Kımpurushas, Pıśāchas, goblins, lions, tigers and other animals. Kratu, according to most accounts, had no wife or child, and remained celibate, but some accounts make the Vālakhilvas his offspring. The remaining five, however, were not assigned equal antiquity. The Bhargavas, Vasishthas, and probably Angirasas, appear to have been the earliest Brahmana families. The Atris and Kaśvapas (from Marichi) originated later.

The Bhrigus or Bhārgavas claim descent from the primeval rishi Bhrigu. Chyavana and Sukra are the earliest Bhrigus mentioned in the Purāņas. Sukra was connected with the Daityas, Dānavas, and Asuras as their guru, and was the rival of Brihaspati, the guru of the Devas Sukra's daughter Devayānī married Yayāti, the Pūru king, and bore him Yadu and Turvasu.

The Vasishthas in Puranic accounts claim to have a mysterious origin, being descended from Miträvaruna in the present Manvantara. Some accounts make the first Vasishtha one of the ten mind-born sons of Brahmä in the Sväyambhuya Manyantara.

The Vasishthas have been connected as hereditary priests with the kings of Ayodhyā from the earliest times. The Purāṇas mention a Vasishtha in connection with Ikshvāku and his sons Vikukshi-Sašāda and Nimi.

Though the Atri clan was an ancient one vying in antiquity with

TRADITIONAL HISTORY FROM THE EARLIEST TIME

the earliest Brāhmaṇa families, the earliest individual member of the Atri family to be referred to in traditional history is Prabhākara, who is said to have married the ten daughters of Bhadrāśva, (or Raudrāśva) an early Paurava king. From Prabhākara's ten sons descended the best Atreva Gotrag.

Marichi's son Kasyapa, the progenitor of the Kasyapas, is made a Prajāpati or identified with Kasyapa, the creator of all beings and the father of the gods and Asuras.

Besides these ancient families, there were other Brāhmaņa stocks such as Viśvāmitras and Jamadagnis, which did not claim primeval antiquity, and which emerged in traditional history at a later period.

6. THE MANDHATRI PERIOD (c 2750-2550 B.C.)

I. The Solar Dynasty

We now turn to the next period, the central figure in which is Māndhātri, son of Yuvanāśva, of the Ikshvāku family. The Yādava empire under Sasabındu (p. 280) was rıvalled by the Ayodhya kingdom under Mandhatri (p. 281), a famous king, a chakravartin and a samrāt According to the Puranic accounts, Mandhatri Yauvanaśva, an Aikshvaka, was a great chakravartin. He was the son of Yuvanāśva, and Gaurī, the daughter of Matınāra of the Pauravas. He was considered the fifth avatāra (incarnation) of Vishnu. He was a great sacrificer and 1s said to have performed a hundred Aśvamedhas and Rājasūvas His gifts and charities are eulogized and songs praising him have been handed down from very ancient times. He is mentioned as a king of very wide sway, magnanimous and giver of cows. Mandhatri married Bindumatī, daughter of Sasabindu of the Yadavas. He had three sons, Purukutsa, Ambarisha, and Muchukunda. His sister (daughter or granddaughter) Käveri married Jahnu of the Kanyakubjas.

The account of his hirth from his father's side and being called Mändhätri because of what Indra said at the prince's birth (mām dhātā, i e. the child will suck me), invented evidently to explain his name, is a late fabrication fashioned with great ingenuity. Mändätri is said to have obtained half the throne of Indra and conquered the whole earth in one day. He extended his sway over the neighbouring Paurava and Känyakubja realms, and also conquered the Druhyus and the Anavas in the north-west. He probably spared the Yādavas who were related to him, but conquered the Haihayas in the Deccan. Mändhätri was succeeded by his eldest son Purutita

Purukutsa continued the conquest of his father The Nagas induced Purukutsa to destroy the Mauneya Gandharvas who had despoiled them. They gave him their princess Narmada, and he

rescued them from the Gandharvas. This shows the extension of the Aryan culture towards the river Narmadā and the land of the Nāgas who were probably aborignes or primitive peoples.

Muchukunda, the third son of Māndhātri, was a famous king. The fable connecting him with Kālayavana and Krishna is an anachronism. B He built and fortified a town on the Narmadā between Pāripātra and Riksha mountains. Muchukunda's supremacy, however, did not last long, and the Haihaya king Mahishmant conquered that town and named it Māhishmatī. The Ayodhyā kingdom declined after Purukutsa, and some of the kingdoms of the Lunar dvnastv again rose into prominence.

2. The Lunar Dynasty

The Paurava realm appears to have lain prostrate at the time of Māndhātri, for he is said to have sacrificed on the Yamunā, and crossing the Paurava kingdom he conquered the Druhyu king, who was pushed from Rājputāna to the borders of the Punjab by the Yādava king Sasābindu. It was probably Sasābindu, the Yādava king, who conquered the Paurava realm, and the Haihaya king Bhadraśrenya traversed it to reach Benares. There arose no king of emhence among the Pauravas for generations after Yayāti and Pūru, so that the kingdom dwindled down, and the neighbourng kings absorbed parts of it till the Paurava kings were reduced to mere kings in name, and probably lived out in exile, as would appear from the account of Dushyanta who was with Turvasu Marutta. son of Karandhama

The Kānyakubja kingdom appears to have been overrun by king Māndhātri in course of his conquest of the Druhyus. The suzerainty of Ayodhyā over Kānyakubja was, however. short-lived, and Jahnu brought Kānyakubja into local prominence. Jahnu married the grand-daughter of Yauvanāšva (i.e. Māndhātri).

The Haihayas (of the Yādava branch of the Lunar dynasty) continued to prosper in their region south of Mālwā, and as noted above, Mahishmant (one of their kings) founded the town Māhishmatt. His successor, king Bhadraśrenya. was an aggressive monarch who conquered the Paurava realm. He also extended his sway eastwards into the Kādi territories, conquered the kingdom, occupied Benares and reigned there There Benares king Haryaśva tried to recover it, but was killed by the Haihayas and his son Sudeva also was overpowered. Later, Benares is said to have come under the possession of Kshemaka Rākshasa from whom it was subsequently recovered by Durdama of the Haihayas. The occupation by Rākshasas indicates the devastation of the country by war resulting in its occupation by the rude tribes from the forest.

The Anavas also grew in power. King Mahamanas, seventh in descent from Anu, extended the sway of the Anavas towards the

TRADITIONAL HISTORY FROM THE EARLIEST TIME

east and the Punjab; and the bifurcation of the Anavas under his two sons Usinara and Titikshu shows the extent of his conquests.

Usinara established a kingdom on the eastern border of the Puniab, which was divided among his five sons. Sibi succeeded to the throne at Multan; from Nriga, who established a separate kingdom in the present Montgomery district and the northern parts of Bikaner, sprang the Yaudheyas; Nava was the originator of the kings of Navarashtra; rulers of the city of Krimila came from Krimi; and Suvrata started the Ambashthas, probably in the eastern Punjab. Sibi Ausinara, however, was the most prominent among Uśinara's sons, and the Sibis sprang from him. Sibi conquered practically the whole of the Punjab except the north-west corner. and established through his sons four kingdoms of (i) the Vrishadarbhas, also known as Sibis, in the home territories of Multan, (ii) the Sauvīras in Sind, (iii) the Kekayas in the modern districts of Gujarat and Shahpur between the Jhelum and the Chenab, and (iv) the Madrakas, with their capital at Sākala (modern Siālkot), in the Lahore division of the Punjab and the Jammu province in Kāshmir.

Titishu moved eastward and crossing Videha and Vaiśālī came down to the east and founded a new kingdom in east Bihār where ruled the Saudyumnas. This new kingdom was known as the "Kingdom in the East," which later developed into the five kingdoms of Anga, Vanga, Kalinga, Pundra, and Suhma, divided among Balı's five sons.

Lastly we come to the Druhyus. As the result of the successful campaigns of Saśabindu. Yuvanāśva, Māndhātri, and Sibi, the Druhyus were pushed back from Rājputāna and were cornered into the north-western portion of the Punjab. Māndhātri killed their king Ahigāra, and the Druhyu settlements in the Punjab came to be known as Gāndhāra after the name of one of Ahigāra's successors. After a time, being over-populated, the Druhyus crossed the borders of India and founded many principalities in the Miechchha territories in the north, and probably carried the Aryan culture beyond the frontiers of India.

THE PARASURAMA PERIOD (c. 2550-2350 B.C.)

The whole of the age which has been designated the Parasima period comprising about twelve generations (till the rise of king Sagara of Ayodhyā of the Solar dynasty) was dominated by the Haihayas and the Bhrigus in turn. There is practically nothing worth recording in the Paurava line during this period which shows a great break till the time of Dushyanta who came after Sagara.

1. The Bhrigus

The Bhrigu-vamsa or the Bhargavas, the family to which Para-

śurāma belonged, dwelt in Anarta (Gujarāt). After the Śaryātas perished and Western India was dominated by the Haihayas, the Bhrigus became associated with the Haihayas. King Kritavirya of the Haihayas is said to have bestowed great wealth on the Bhargavas who were his priests. On refusal of the Bhargayas to return it. Kritavirya's descendants ill-treated them and used violence against them so that they fled into Kanvakubia in the Madhyadeśa for safety. Chief among the Bhrigus was Richika, son of Urva, a famous Rishi skilled in archery, who cherished great wrath towards the Haihayas. In order to wreak vengeance on the wicked Haihayas. the Bhargavas engaged themselves in collecting arms and sought marital alliances with the Kshatriya ruling families. Richika sought in marriage Satvavati, the daughter of king Gadhi of Kanvakubja. The king did not approve of the match and evaded it by demanding an almost impossible price in the form of a thousand black-eared horses. Richika, however, fulfilled the condition and married Satyavati. Jamadagni, the celebrated Bhrigu sage, was born of this marriage He was thus Viśvämitra's sister's son.

Jamadagni became skilled in archery and arms and made an alliance with the ruling family of Ayodhyā by marrying Renukā daughter of Renu, a junior king in the line Jamadagni was not a militant Rishi but followed peaceful avocations.

When the Haihaya king Kārtavirya came to his hermitage with his army, Jamadagni treated him with right royal hospitality through the help of his celebrated divine Kāmadhenu (wish-giving cow). On Jamadagni's refusal to part with the cow. Kārtavirya forcibly seized her; but the Yavanas, produced from her body, defeated Kārtavirya. Subsequently, Kārtavirya destroyed the hermitage and carried away the sacred cow.

Four or five sons were born to Jamadagni, of whom Rāma (or Parašurāma), though the youngest, was the greatest among the Bhṛgus. The Purāmas represent Parašurāma as an incarnation of Vishnu. He is said to have been born during the period of interval beween the Tretā and Doāpara Yugas. The Maiābhārata, however, refers to him as an incarnation only in two late passages. The Parašurāma is represented as a very great warrior, skilled in all weapons, especially in archery. The Parašu (battle axe) was his special weapon on account of which he came to be called Parašurāma in distinction from Rāma Dāšarathi. The slaughter of the Kshatriyas twenty-one times, and ridding the earth of the Kshatriyas are said to be the principal feats of Parašurāma.

The Bhrigu-Haihaya conflict started after Kartavirya (Arjuna or Sahasafajuna) raided Jamadagni's hermitage in the absence of Rūma, molested the old sage and forcibly took away the sacred cow (as already stated). In revenge, Rāma lopped off Arjuna's arms and slaughtered him like an ordinary animal. Thereupon, on the

TRADITIONAL HISTORY FROM THE EARLIEST TIME

advice of Jamadagni, Rāma set out on a pilgrimage for the expiation of the sin of killing Ariuna. During the absence of Parasurama. Ariuna's sons slew Jamadagni when he was in deep meditation. This enraged Rama to the extreme, and he declared a vendetta not only against the Haihayas, but against the Kshatriyas in general, and is said to have rid the earth of the Kshatriyas twenty-one times. At regular intervals after the birth of fresh Kshatriyas, Rama restarted his campaign and slew all of them. Rāma filled a number of lakes at Kurukshetra with the blood of the Kshatrivas. As the result of these raids, some Kshatriyas fled to the mountains or hid themselves among the women-folk. Only Rikshavan of the Pauravas, Sarvakarmā of Ayodhyā, Brihadratha of Magadha, Chitraratha of Anga, and Vatsa of Kāśi are said to have escaped from Rāma's slaughter.20 All this, indeed, is an exaggeration. It appears that on the strength of the matrimonial alliances of the Bhargayas with the ruling families of Kanyakubja and Ayodhya, and also of the growing discontent due to the devastating raids and consequent unpopularity of the Hathavas, Roma organized a confederacy of various kingdoms ıncluding Vaiśālī, Videha Kāśi, Kānyakubja and Ayodhyā which fought the Haihayas on various battlefields. These are probably referred to by the annihilation of the Kshatriyas twenty-one times. As the result of his all-round attack from all fronts, the Haihavas, for a time at least, must have suffered a serious setback.

Räma is said to have retired to the forest for penance in order to atone for his sins after each slaughter. Finally, to rid himself of the sin, he donated the whole earth to Kaśyapa. To free the earth from any possible future attacks from Räma, Kaśyapa banished him from the earth which now belonged to him. Räma then wrested from the sea the west coast and colonized it. The whole of the west coast from Bhrigukachchha (Broach) down to Cape Comorin retains association with Parašurāma.

According to the genealogical tables, Parašurāma is several generations prior to the period of Rāma (son of Daśaratha) and the Pāṇḍavas; yet he has been brought into connection with these heroes in the Rāmāyaṇa and the Mahābhārata. Thus he is said to have appeared before Rāma after his marriage with Sītā, advised Balarāma and Krishṇa with regard to a suitable site for safety against the raids of Jarāsandha, to have been the preceptor of Bhishma, Droṇa, and Karṇa, to have fought against Bhīshma to have advised Duryodhana not to fight the Pāṇḍavas, etc. These are clearly in stances of anachronism as the result of the anxiety of the writers of the Epics to establish contact of their heroes with the great Bhārgava. In order to get over these obvious anachronisms a theory was promulgated, at a later date, that Parašurāma was chirañ-fine (immortal).

2. The Haihauas

After the death of Purukutsa, the kingdom of Avodhvā lost its paramountcy in Upper India and the Haihava branch of the Yadavas gradually began to extend its sway from the west, penetrating to the east and north, as noted above (pp. 284 ff.). Reference has already been made to Kritavirva and his son Ariuna, a great monarch. samrāt, and chakravartin who, during his long reign, extended the Haihava sway far and wide and raised the Haihava power to great eminence. Ariuna is known by his patronymic Kartavirya and also as Sahasrāriuna (thousand-armed). The thousand arms ascribed to Arjuna were possibly his fleet of a thousand ships. Arjuna propitiated Dattätreya, a sage regarded as an incarnation of Nārāyana, and started his career of conquest which at once carried the Haihaya empire to great prominence and supremacy. He fought the Karkotaka Nagas who occupied Anupa (territories near the mouth of the Narmadā), captured Māhishmatī and made it his capital. Kārtavīrya also defected Ravana who invaded his territories, brought him captive and subsequently released him. He appears to have led his victorious campaigns from the mouth of the Narmada to as far north as the Himālayas, since in one of his raids he is said to have come across the hermitage of Apava Vasishtha in the Himalayas and burnt it, as a consequence of which he was cursed. Ariuna is said to have conquered the whole earth, and performed a number of sacrifices.

Arjuna's conflict with Jamadagni and Rāma, to which we have already referred, occurred towards the end of his long and prosperous reign.

Barring his relations with Apava Vasishtha and Jamadagni, which show Arjuna in an unfavourable light as inimical to the Brāhmanas, he is always the subject of high praise and encomuum in epic works He is described as an ideal monarch unparalleled in penance, charities, learning, and virtues, who conquered the whole world and ruled it with perfect justice. It is only his connection with the Bhṛigus that has been responsible for painting the ideal monarch in the blackest colours. His victories show that he carried the banner of Aryan conquest far and wide, and that Māhishmatī on the Narmadā was an outpost of the Aryan colonies of those days

Mr. Karandikar, after a thorough study of the Puršņas. has suggested quite a different interpretation of the Sahasrārjuna episode.²¹ According to him, the Bhrjgus were great navigators and expert mariners who controlled the maritime trade between India and the western world, and occupied the coastal line on the Arabian Sea. They amassed a great fortune through their trade with foreign countries. The reason of the Bhrjgu-Haihaya conflict was that Arjuna did not wish that the Bhrjgus, who were agents of the foreigners, should thrive at the cost of the people. He wanted to keep the trade and commerce of the Indian people under the

control of an Aryan state, for the Bhrigus were more self-seekers than patriots. Ariuna sought the help of the Atris, who were equally expert ship-builders, and who built for him a fleet of a thousand ships or a ship with a thousand oars (making Ariuna Saharsabāhu, i.e. thousand-armed). Karkotaka Nāga, Rāyana and others who were defeated by Arjuna were seeking some opportunity to wreak vengeance on him. Arjuna's effort at getting control of the sea-trade was an eyesore to the Bhrigus, and further fuel was added by Arjuna's demanding back the wealth he had bestowed on the Bhrigus. Paraśurāma led the opposition with the aid of the parties defeated by Ariuna, killed him, and destroyed the Haihaya power. The annihilation of the Kshatriyas twenty-one times is interpreted as the destruction of the population in the Narmadā region a number of times in order to wipe out the memory of the popular king Ariuna On the devastated Haihava realm Paraśurāma founded new cities, and colonized some tracts in the west coast, founding Surparaka which became the centre of trade. The result of Parasurama's activities was to divert the trade from the hands of the Aryans in the north to the Dravidians in the south.

Whatever we might think of the above interpretation there is no doubt that as the result of the Bhrigu-Haihaya conflict the Haihayas received a great setback But they soon recovered from their reverses, and again extended their power in Northern India. Arjuna had many sons of whom the chief was Javadhvaja who reigned in Avanti, Sürasena, another son, appears to have been associated with Mathura, while Sura, the third son, probably was connected with Surashtra. Jayadhvaja's son Talajangha had many sons, of whom the chief was Vitihotra. The Puranas state that the Haihayas formed five groups, viz. Vītihotras, Sāryātas, Bhojas, Avantis, and Kundikeras all of whom were collectively called Talajanghas 22 Of these, Vitihotra and Tundikera or Kundikera were in the Vindhyan range; the Sāryātas were in Western India, Bhojas near the Aravallı hills, and Avantis in Mālwā. They carried their raids not only against the kingdoms of the Madhyadesa but even against Kānvakubja, Kosala, and Kāśi. The Kānyakubja kingdom appears to have succumbed to these raids. The Haihayas killed Harvasva of Kāśi in a battle in the Ganges-Jumna Doab, but met with reverses later on, and the Vitihotra prince on the Benares throne had to seek refuge with a Bhargava sage After this, the Haihava dynasty practically came to an end, and the king became a Brahmana.

The kingdom of Ayodhyā, considerably weakened after Māndhāṭri and Purukutsa, was attacked by the Haihayas with the cooperation of the hardy and semi-barbarous tribes (called Sakas, Yavanas, Kambojas, Pāradas, and Pahlavas) from the north-west. This co-operation indicates that the intervening kingdoms between Ayodhyā and the frontier countries were overthrown by the Hāihayas. Bāhu (or Asita according to the Rēmāyana), king of Ayodhyā, had to leave the throne and seek refuge in the forest where he died near the hermitage of Aurva Bhārgava. His queen gave birth to a son in the forest who was named Sagara and was educated by Aurva Bhārgava. As we shall presently relate, Sagara was the greatest king of the Solar dynasty during this period and recovered his lost kingdom with the help of the Bhārgavas. Vaišāli and Vidišā also were attacked by the Häihayas and Vidišā probably was under Häihaya occupation. Tradition, however, suggests that the Häihaya conquests towards the east were checked by the Vaišāla kings.

The Haihayas thus were engaged in making continual raids and over-throwing kingdoms, they, however, did not found any kingdoms in the countries overrun by them which lay devastated and fell an easy prey to the attacks by wild tribes.

3. Other Lunar Dunasties

The Yādavas: Contemporaneous with king Sagara of Ayodhyā king, advancing south-westward, by offering his daughter Kešini in marriage to the latter. King Vidarbha of hen retired towards the Deccan into the country named after him, leaving the whole of northern India to acknowledge the suzerainty of Sagara. After Sagara's death, the Yādavas of Vidarbha extended their authority northward over the Haihaya country. The three sons of Vidarbha founded three sub-lines. Kratha or Bhima, the eldest, continued the main line. The second son Kaišika became king of Chedi and founded the Chedi line.²³ The location of the territories of the youngest son Lomapāda has not been given.

The Anavas: The Anava kingdom in the east founded by Titikshu appears to have been considerably expanded by the time of king Bali of the Anavas, a contemporary of Sagara, and was subsequently divided among his five sons, Anga, Vanga, Kalinga, Purdra, and Suhma, who were begotien by the sage Dirghatamas Māmateya on queen Sudeshnā at Bali's request. The capital of Anga was Mālini, four miles west of Bhāgalpur. Separated from Magadha by the river Champā, Anga comprised the modern districts of Bhāgalpur and Monghy. Vanga was further east corresponding to the modern Dacca and Chittagong Divisions. Pundra was Northern Bengal. Suhma comprised the Burdwan Division, and Kalinga, the sea-coast of Orissa including the Northern Circārs.

Kānyakubja: A few generations after Jahnu, came Kušika the originator of the Kušikas, Kušika's son from Paurukutsī, Purukutsā's descendant in about the sixth degree, was Gādhi. Gādhi is

described as an incarnation of Indra, which probably means that he had an alternative title such as Indra or one of his synonyms. Gädhi's daughter Satyavatī, as already stated, was given in marriage to the Bhrigu sage Richika Aurva. Through Richika's favour, Gadhi had a son Viśvaratha or Viśvamitra who is a prominent figure in ancient legends. Convinced of the superiority of the spiritual power of Brahmanism by being worsted in his attempts to deprive Vasishtha of his sacred cow, he resolved on attaining Brahmanism, and set out for austernties after renouncing his kingdom. Eventually, he succeeded in winning recognition as a Brahmana or Brahmarshi even from Vasishtha. Then, Viśvāmitra is said to have championed the cause of Satyavrata Triśanku in opposition to Vasishtha, and raised Triśańku to divine celebrity. Further, Viśvāmitra is said to have harassed Harischandra, Trisanku's son, in order to test Vasishtha's praise of him as unrivalled in virtues. Viśvāmitra, again, is said to have slain Sakti and other Vasishthas through Saudasas, i.e. descendants of Sudās. Then Viśvāmitra is spoken of as having adopted Sunahsepa as a son whom he saved from being offered as a substitute victim for Harischandra's son Rohita. Visvamitra further appears in connection with Rama of Avodhva, and also as father of Sakuntala who was married to Paurava Dushvanta and gave birth to the celebrated emperor Bharata. The Puranas further show that the rivalry between Viśvāmitra and Vasishtha is not only endless but hereditary

It appears that the Purāṇas combine the various accounts of different Viśvāmitras and roll them into one. For instance, Viśvāmitra, the father of Śakuntalā, Viśvāmitra, the contemporary of Rāma, and Viśvāmitra, the contemporary of Hariśchandra, Jamadagni, Sunajsepa and of Sudās, Kavasá Allūsha and the Dāśarājīa were quite distinct personalities. The heroes of different episodes, relating to widely distant ages, have been unified into a single personality in the Purāṇas, and this has caused a good deal of chronological confusion and genealogical chaos.

Viśvāmitra, the Kānyakubja king, was related to Jamadagni and Parasiurāma. It is therefore likely that the Kānyakubja king dom helped the confederacy raised by Parasiurāma against the Haihayas. Viśvāmitra ruled for some time, and as the result of his discomfiture at the hands of Vasishtha, relinquished his kingdom and left for austerities in a forest leaving his family in a hermitage near Ayodhyā. Viśvāmitra saved Sunahšepa, son of Ajīgarta, who was being sacrificed as a substitute for Rohita, son of Harischandra and adopted him, after renaming him Devarāta. Viśvāmitra cursed them to become Mechchhas such as Andhras, Pundras, and Sabaras. Ashṭaka probably succeeded Viśvāmitra on the Kānyakubja throne.

tended his sway further, and annexed the country around Kauśámbi which came to be named the Vatsa country. Vatsa's son Alarka regained the capital Vārāṇasī from the Rākshasas who had occupied the city since the days of Bhadraśrenya and re-established it as the Kāši capital. Alarka had a long and prosperous reign.

4. The Solar Dunastu

Ayodhyā: After the rise of the realm to great heights in the reigns of Mandhatri. Purukutsa, and Trasadasvu, the empire appears to have remained, if at all, merely in name, and we do not meet with any important king till we come to Trayyaruna, Satyavrata-Triśanku, and Harischandra. Satyayrata--Triśanku is the subject of numerous fantastic tales in the Puranas24 Being expelled by his father at the instance of his family priest on account of some excesses, the prince is said to have led the life of a Chandala wandering in the woods on the banks of the Ganges for twelve years. Trayyāruna died in the meanwhile, but Triśanku was not recalled. There was a great famine lasting for nine years during the time of Triśanku's exile. While in the forest, Triśanku supported the family of Viśvāmitra which was starving, when Viśvāmitra, after renouncing the kingdom, had gone to the forest to perform penance. Viśvāmitra learnt of the generosity of the prince after his return, and in gratitude, as also in order to defeat his antagonist Vasishtha, got Triśańku installed on the Avodhya throne. Triśanku was succeeded by Harischandra, the embodiment of truth. He was a samrat and is said to have performed the Rajasuya. The story of Harischandra, whose truthfulness was put to very severe tests by Viśvāmitra, is well known. Harıśchandra's son Rohita is said to have built Rohitapura.²⁵ Rohita's younger son Champa built Champapuri near Bhagalpur in east Bihar. Sixth in descent from Harischandra was Bāhu. Sagara, so named because he was born with the poison which his step-mother administered to his mother, was born posthumously to Bahu in the hermitage of the sage Aurya. Sagara was taught archery by the sage Aurva, who specially instructed him in the celebrated Agneyastra. The foreign tribes, who came in the train of the Haihayas (ante, p. 289 ff.) and settled down in Ayodhya, were called Kshatriyas. They respected Brahmanas, observed Brahmanic rites and rituals, and retained Vasishtha as their priest. They remained in possession of Ayodhyā for over twenty years till Sagara attained maturity.

Sagara had to pass through Madhyadesa and Central India to lead an expedition against the Haihayas. After destroying them Sagara led his conquering hordes against their hardy outlandish allies, the Sakas, Yavanas, Kambojas, etc. He would have completely crushed them but for the intercession of his priest Vasishtha with whom they sought refuge. Sagara then let them off after im-

posing on them certain signs of symbolical defeat and disgrace; the Sakas were made to shave only half their heads, Kambojas to have their heads completely shaved, Pāradas were forbidden to shave or trim the hair of their heads, and Pahlavas to shave their beards, thus rendering them unft for Vedic ceremonials.²⁶ The story seeks to interpret, in the manner of the Purāṇas, the peculiar customs of these peoples who were becoming Kshatriyas under the priestly guidance of the Vasishihas. Sagara's same is connected with the ocean (sāgura) in a fantastic legend which states that the ocean became Sagara's son.²⁷

Sagara subjected all contemporary powers and was the emperor of the whole of the north. The only important kingdoms to survive Sagara's onslaughts appear to be Videha, Vaisšali and Anava in the east, the Vidarbhas and the Yādava branch on the river Chambal in the south, Kāši in the Madhyadesia and Turvasus in the hilly tracts of Rewah. Sagara's eldest son Asamañjas, being cruel to the citizens, was discarded, and the latter's son Ansumant succeeded him.

Vaisālī: Karandhama, king of Vaisālī, is said to have been besieged by a confederacy of kings whom at last he defeated. He also rescued his son Avīkshit, who was captured by the king of Vidišā (probably a Haihaya chieftain) and his allies after a great conflict, and dealt them a severe blow. Marutta, one of the sixteen universal monarchs of antiquity, was born to Avikshit from Visala. daughter of the Vidiśā king. Marutta was a ceaseless and tireless performer of sacrifices. He had thousands of vessels, sacrificial utensils, etc., made of gold. Despite his great valour, Marutta had immense troubles from the Nagas. He was determined to exterminate them completely by setting fire to their habitations, though they took refuge with his father; but, when the Nagas restored to life the Rishis killed by them by means of herbs and by sucking out the poison, he let them off. According to Pargiter, these enemies were really the Haihayas, and Marutta deserves credit for ending the Haihaya aggressions permanently in the east.28

5. Brāhmana Families

As noted above, the Birigus or Bhārgavas practically dominated the whole epoch, and Richika, Jamadagni, Paraśurāma, and Agni Aurva were the prominent Bhārgavas.

Ayāsya is the first Angiras mentioned in traditional history, and he officiated as a priest at the sacrificial ceremony of offering Sunah sepa as a victim in the reign of Harischandra of Ayodhyā. The Angirasas are found in connection with the Vasāla kings as their hereditary priests. Ušija Angiras was the priest of Karandhama and Avīkshit, and two of his sons, Brihaspati and Sanvarta officiated for Marutta Avīkshita. Uchathya, the eldest son of Ušija, had by his wife Mamatā a son named Dīrghatamas, who was born blind.

Dîrghatamas was expelled for gross misconduct and set adrift in the Ganges, where after floating some distance downstream, he was rescued by king Bali of the Eastern Anavas. At Bali's desire, he begot five sons on Bali's queen, as mentioned above (p. 290). Dirghatamas is later said to have regained his sight. Towards the end of his life, Dirghatamas consecrated king Bharata of the Pauravas. Brihaspati had a son Bharadvāja, who moved to Kāśi and became priest to king Divodāsa. His son Vitatha was adopted by Bharata and he continued the Paurava line.

Datta Atreya, who was propitiated by Haihaya Arjuna, was the only prominent figure among the Atris.

Devarāj Vasishtha was a priest of the Ayodhyā kings during the reigns of Trayyāruņa and Satyavrata. His descendant officiated for the foreign Sakas, Yavanas, etc. and later became priest to Sagara. Another Vasishtha was Āpava, in the Himālayas, whose hermitage was burnt by Haihava Ariuna.

Kaśyapa, who officiated as priest at the sacrifice of Rāma Jāmadagnya and to whom the latter donated the whole earth, is the earliest Kaśyapa mentioned in traditional history. He is later said to have expelled Rāma from the earth as noted above (p. 287)

The only historical figure among the Agastyas is the Agastya married Lopamudra and was a contemporary of Alarka, grandson of Pratardana of Kāši.

With the wars of Parasurāma and Sagara described above, the Kṛitayuga, according to the Purāṇas, came to an end. As the result of these wars, the old kingdoms of the Pauravas. Kāṇyakubjas, Druhyus, and Ānavas in the Punjab gradually disappear. The Yādavas recede into the Deccan, while the Haihayas are completely routed. The eastern kingdom of Vaišāh, Videha, Ayodhyā, Kāśi and the Ānavas in Bengal continue to exist during the next period.

8. THE RAMACHANDRA PERIOD (c. 2350-1950 B.C.)

1. The Solar Dynastu

There was some setback to Ayodhyā after Sagara's death. Sagara was succeeded by his grandson Amsumant. The dynasty again rose to prominence under Amsumant's second successor Bhagiratha, and the latter's third successor Ambarisha Nābhāgi. Bhagiratha is included in the list of sixteen famous kings and is celebrated as a chakravartin and a samrāt, as also one who gained fame by his gifts of cattle. He was a devotee of filva. He is reputed to have brought down the sacred river Ganges (which is known as Bhāgirathi after him)²⁹ from the heavens, through the power of his penance, in order to liberate his ancestors cursed by Kapila. The fable perhaps indicates that Bhagiratha was the originator of the worship of the Gangea, or more plausibly, it was have some reference to the

canals dug by him from the Humālayas. Ambarisha was a powerful monarch and in his reign Ayodhyā rose into prominence. The legends about his connection with the Bhagavata cult and the Dvadasi vow are later creations. His third successor was Rituperna who figures in the well-known Nala episode.30 Rituparna's son Sudāsa has been identified with the Vedic Sudās of the Dāśarājāa by some scholars: but beyond mere similarity of names, there is nothing in support of this identification. Around Sudasa's son Mitrasaha has grown a cluster of wild and fantastic legends, invented perhaps to explain his second name Kalmashapada. The king is said to have served human flesh through mistake to his preceptor Vasishtha who doomed the king to become a Räkshasa; but on realizing that the king was not at fault, the sage limited the duration of his curse to only twelve years. The king, in his turn, prepared to curse his ouru, but at the intercession of his queen, threw the mantra-charmed water over his own feet, because throwing it on the ground would have rendered the earth barren for years. But the charmed water turned his feet into stone, which led to his being called Kalmashapada.31 After Kalmashapada resumed his natural state, he had, on account of a curse, to raise issue from his wife by a Niyoga or levirate union with Vasishtha. Asmaka, the son of the union, founded the city Paudanya.32 Asmaka had a son named Mülaka, who later came to be called Nārīkavacha because it is said he sought protection among the women-folk through fear of Paraśurama. But Parasurama flourished generations before Asmaka, and the story has no chronological value. Probably it refers to the disturbed state of the kingdom after the days of Kalmashapada when his successors were weaklings, and during this period, when the Bharatas and Pañchālas were at the height of their power, the Ayodhya kings appear to have suffered reverses as the result of which Mülaka was to be brought up in secret. It appears that there was a bifurcation in the Avodhya line for some six or seven generations after Kalmashapada's time. The two lines, however, were united in a single monarchy under Khatvånga, also known as Dilīpa II. He was a great samrat and a chakravartin, and is said to have helped the gods in their fight against the Asuras. He was a great devotee of Vishnu, and had a son named Raghu. The Ikshväku dynasty came to be called Raghuvamsa on account of this celebrated Raghu. He conquered the whole earth and performed the Visvajit sacrifice Being an ideal monarch. Raghu has been called the first king of Ayodhya. Raghu was succeeded by his son Aja, the consort of the Viderbha princess Indumati, to whom was born Dasaratha. Dasaratha was a valiant and all-conquering monarch who led his victorious campaigns throughout the length and breadth of North India, and spread the Aryan culture far and wide. The Yadava contemporary of Dasaratha was Madhu who had consolidated the Yadava kingdom, and the contemporary Pauravas held at least four states in the Ganges-Jumna Doāb, with the north Paāchāla branch specially prominent. The Kosala kingdom at the time of Dašaratha was bounded on the east by Videha, Vaišāl and Aṅga; the Vatsa country which formed part of Kāši lay to its south; it was bounded on the west by the Paurava principalities of north and south Paāchāla, the main Hastinapura realm, and one more Paurava kingdom between north Paāchāla and Kosala. The region south from the Jumna up to Gujarāt and beyond the Vindhya and the Satpura mountains was under Yādava domination with the emperor Madhu at the helm.

Besides his three principal queens, viz. Kausalyā, Sumitrā and Kaikeyī, Daśaratha had a number of other wives. Daśaratha had married Kaikevi on the stipulation that the son born of her was to succeed him. He had a daughter Santa whom he gave in adoption to the Anga king Lomapada. Being without an heir for a long time. Daśaratha performed Putrakāmeshti (rite for securing male issue) on the advice of Vasishtha under the guidance of Rishvaśringa, who was married to Santa. As a result, four sons were born to Dasaratha, viz. Rāma to Kausalvā, Bharata to Kaikevī and Lakshmana and Satrughna to Sumitra. Rama and Lakshmana obtained instruction in the science of archery from Viśvāmitra and they helped him in the performance of a sacrifice by vanquishing the horde of Rakshasas that disturbed him. Then Viśvamitra took the princes to Mithilä, where Rāma fulfilled the conditions and was married to Sītā It is later on when Daśaratha proposed to instal Rāma as crown prince that the main story of Rama, as recorded in the Ramayana, may be said to begin.33

The story of Rāma is particularly important as it brings South India definitely into view for the first time. Various have been the theories and interpretations about the Rāmāyaṇa, and the text of the epic has been subjected to interpolations and additions in every stage of its career But despite its accretions, mythological and fabulous legends, etc., the text can be made to yield historical facts. When preparations were made to instal Rāma, the eldest son, as heir apparent, palace intrigues set in, and his step-mother Kaikeyi secured through Dasaratha the banishment of Rāma along with Sītā and Lakshmana to the Dandaka forest for fourteen years. Dandaka in these days was a great impenetrable forest save for a few patches here and there occupied by Aryan adventurers. Rāma first went to Prayaga and from there south-west to the region of Bhopal, whence he proceeded south across the Narmadā and then probably to the Chhattisgarh district, where he dwelt for ten years. Thereafter he went south to the middle of the Godávari in the province called Janasthana, which was a colony of the Rākshasas, who had intercourse with their kingdom in Ceylon. The Rākshasas ill-treated the Munis (sages) and Rāma espoused the latters' cause and killed a number of Rākshasas. In revenge Rāvaņa, the Rākshasa king, carried away Sītā to Ceylon. Rāma proceeded south in quest of Sītā, came to lake Pampā and Rishyamūka Parvata, where he made friends with Sugrīva, the king of the Vānaras, who was expelled by his brother Vāin. Rāma killed Vālin and reinstated Sugrīva on the throne. With the aid of the Vānara army and chiefs, Rāma invaded Ceylon, defeated the Rākshasas, killed Rāvaṇa and recovered Sīta. He placed Bibhishaṇa, younger brother of Rāvaṇa, on the throne in Ceylon and returned to Ayodhvā.

Bharata acted as regent during Rāma's exile. Rāma was crowned after his return to Ayodhyā, and reigned prosperously for many years.

The story of Rāma, divested of its miraculous, fabulous, incredible and mythological elements, clearly indicates that he was a great king who spread Aryan ideas and institutions into regions far and wide. "Rāma's rule" is still proverbial for the Golden Age.

Rāma's younger brothers ruled over different provinces. Lakshmana had two sons, Angada and Chandraketu, and they were assigned two countries in Kārapatha-deśa near the Himālavas, with their respective capitals at Angadīvā and Chandrachakrā. Bharata apparently got the Kekaya kingdom which was the province of his mother. and also Sindhu, i.e. Upper Sind. His two sons, Taksha and Pushkara, conquered Gandhara from the Gandharvas, and founded respectively Takshasilā and Pushkarāvatī.34 Satrughna fought the Sätvata-Yādavas on the west of the Jumna and killed Mādhava Lavana, son of Madhu. He established his capital at Madhupuri or Madhurā re-naming it as Mathurā, and his son Subāhu reigned there. Rāma had two sons, Kuśa and Lava, born of Sītā in the hermitage of Välmiki after Rama had deserted her in deference to public opinion. Kuśa succeeded Rāma in the Ayodhyā kingdom, while Lava got the northern portion of Kosala with Śrāvastī as capital.

These collateral kingdoms, however, appear to have come to an end soon. The two Gandhāra states are not mentioned any further, and probably were amalgamated by the neighbouring Druhyus. Satrughna's sons were expelled from Mathurā by the Yādava king Bhīma Sātvata, and Mathurā became a Yādava prīncipality. No further account is given of the territories of Lakshmana's sons nor of Lava's kingdom. Ayodhyā sinks into insignificance hereafter in traditional history, the chief rôles being played only by the Pauravas and the Yādavas.

Videha: Sīradhvaja, the father of Sītā, was one of the most celebrated of the Janakas. King Sudhanvan of Sānkishya demanded the hand of Sītā in marriage from Sīradhvaja, but the latter killed Sudhanvan in a fierce battle and installed his own brother Kuśadhvaja on the Sānkishya throne. Sīradhvaja's daughters, Sītā

and Urmilä were married respectively to Rāma and Lakshmaṇa, sons of Daśaratha, and Kuśadhvaja's daughters Māṇḍavī and Śrutakirti. respectively to Bharata and Satrughan.

Vaisāli: Marutta's son Narishyanta is said to have performed a agreat warrifore, and he was a great donor. His son Dama was a great warrior who won a Dašāma prıncess after defeating rival kings in a Svayamvara. A few generations after Dama came Tripabindu, who is said to have ruled during the third quarter of the Tretā Age. Tripabindu married Alambushā and had a son Višāla and a daughter Ilavilā. Ilavilā was given in marriage to Pulastya, and their son was Višravas Ailavila. Višāla is credited with the foundation of the capital Višālā, and so this kingdom came to be called Vaišālī (a name hitherto used in anticipation). Pramati or Sumat, the last name in the list, was a contemporary of Dašaratha.

2. The Lunar Dynasty

Paurauas: Dushyanta, the Paurava hero, appears to have flourished about a couple of generations subsequent to king Sagara of Ayodhyā. Dushyanta was adopted as heir by the Turvasu king Marutta who had no son, so that the Turvasu line merged into the Pauravas. The central power of the Ikshväkus became weak after Sagara's death, and Dushyanta took that opportunity of recovering his ancestral kingdom. Dushyanta also revived the dynasty and hence is styled its Vanisakara. He married Viśvämitra's daughter Sakuntalä who was brought up in the hermitage of one Kanya of the Kasyapa family, and his son was the celebrated prince Bharata.

Bharata, also known as Damana or Sarvadamana, performed a number of sacrifices on the Ganges and the Jumna with the aid of Dirghatamas Māmateya. He also sacrificed on the Sarasvatī. He was a great conqueror and samrat with a wide sway. He extended his dominions northward and his territories stretched from the Sarasvatī to the Ganges. The Paurava dynasty came to be called Bharatas after the time of Bharata. It was probably during Bharata's regime that the headquarters of the state were shifted from Pratishthana to the city, called later Hastinapura, after his successor Hastin. According to some accounts, Bharata gave his name to our country which was henceforth called Bharatavarsha. Bharata was disappointed in his sons and killed them. He propitiated the Maruts in order to obtain an heir and they gave him Brihaspati's son Bharadvāja as an adopted son. Bharadvāja's son Vitatha, however, succeeded Bharata. Hastin, the fifth successor from Bharata, had two sons Aiamidha and Dvimidha under whom the Paurava realm extended and fresh kingdoms were founded. Ajamīdha, the elder, continued the main line at Hastinapura and Dvimidha founded the Dvimidha dynasty in the modern district of Bareilly. Ajamidha had three sons, viz. Riksha, Nila, and Brihadvasu. On Aiamidha's

death, the main Paurave realm was divided among these sons, Riksha succeeding his father at Hastināpura in the main line, which remained the Paurava line, and Nila and Bṛihadvasu founded what later came to be known respectively as the north Pańchāla and south Pańchāla dynasties.³⁶

The country came to be known as Paāchāla from the "five" sons of Bhṛimyaśva (the sixth successor from Ajamidha) who were jocosely nicknamed "capable" (paācha alam). The Paāchālas, thus, were a branch of the Bharatas. The name suggests an amalgamation of five tribes, and there has been some speculation as to which particular tribes went to form the Paāchālas. The Paāchāla kingdom was divided between the five sons of Bhṛimyaśva, each of them receiving a small principality. Mudgala, the eldest, founded an important branch. Vadhṛyaśva, the grandson of Mudgala, extended the kingdom, and his son Divodāsa further augmented it. Pargiter and other scholars identify this Divodāsa and his descendant Somadatta-Sudāsa with their Vedic namesakes, the latter of whom was the chief participant in the celebrated battle of ten kings.

Yādavas: Kratha-Bhīma continued the main Yādava line of Vidarbha, and Kaiśika, his younger brother, was the progenitor of the Chedis. The most important king of Vidarbha was Bhīmaratha, father of the celebrated Damayanti, who was married to Nala of Nishadha. Madhu who came about ten generations after Bhīmaratha, appears to have consolidated the small Yādava principalities into which the Yādavas were divided before him. Madhu's son Lavaŋa was killed by Satrughna, who installed his own son Subāhu in Mathurā. But Subāhu was ousted by Bhīma Sātvata, son of Satvat, who was Madhu's fifth successor.

Eastern Ānavas: We do not know any particulars about the kings in the Afiga genealogy till we come to Lomapāda, who is placed seventh in the genealogical list. Lomapāda was a well-known archer and a great friend of king Daśaratha of Ayodhyā, the father of Rāma. Lomapāda was childless and adopted Śāntā, the daughter of king Daśaratha. Śāntā was married to Rishyaśrińga who performed the Putrakāmeshiti sacrifice for Lomapāda as the result of which Lomapāda got a son named Chaturańga. Lomapāda's great-grandson Champa gave the name Champā to the Anga capital, which was till then known as Mālinī.

Kāźi: King Alarka, who finally drove the Rākshasas from the restablished his capital there, is said to have been born to Ritudhvaja (another name of Vatsa) from Madālasā. Alarka was a spiritually-minded king and relinquished the kıngdom in favour of his brother when the latter invaded it. Alarka was succeeded by his son Sannati.

3. Brāhmana Families

Among the Bhargavas during this period, appears Valmiki of the Rāmāyaṇa, who was called Prachetasa.

The father of Sakuntalā was an important Viśvāmitra in this period, and another appears as the contemporary and rival of Vasishtha, the priest of Mitrasaha-Kalmāshapāda.

9. THE KRISHNA PERIOD (c. 1950-1400 B.C.)

With the coronation of Rāma as king of Ayodhyā after the destruction of the Rākshasas began the Dvāpara age which ended with the Bhārata War. During this period it is only the Panchālas, Pauravas, and Yādavas that prominently figure in traditional history, while Ayodhyā and others sink into the background.

1. Pañchālas

The North Panchala power rose into prominence during the reign of Sudasa who made extensive conquests. He defeated the Paurava king Samvarana and conquered his kingdom. Sudāsa was succeeded by his son Sahadeva and grandson Somaka, but the fortunes of the Pańchālas waned after the time of Sudāsa. Samvarana, the Paurava king, had recovered his territory probably from Somaka. and later, king Ugrāvudha of the Dyimīdhas killed the North Pañchāla king (probably the grand-father of Prishata) and annexed his realm. Prishata, the exiled North Panchala claimant, sought refuge in Kāmpilya of South Panchāla. Ugrāyudha then attacked the Pauravas after Santanu's death, but was defeated and killed by Bhishma, who restored Prishata to his ancestral kingdom of Ahichchhatra, Drupada succeeded his father Prishata in North Panchala. Drona, a fellow student, whom Drupada had insulted, defeated the latter with the aid of the young Pandu and Kuru princes who were his disciples Out of both the North and South Panchalas which he thus conquered. Drona kept North Panchala for himself and gave South Panchāla to Drupada. The Somakas and Srīnjayas, the remnants of the Panchalas, appear to have joined Drupada as they accompanied him in the great Bharata War. Drupada performed penance in order to get a son who would avenge his defeat by Drona and kill him, and Dhrishtadyumna was born as the result. The Panchalas played a very important part in the age of the Bharata War. The Pāņdavas married Draupadī, the Pañchāla princess, daughter of Drupada, and the Panchalas were the staunch supporters of the Pandavas.

Brahmadatta seems to have been an important king among the South Paächālas. Tradition connects him with the revision and rearrangement of Vedic and exegetical texts. He fixed the Kramapāṭīta of the Rigveda and of the Atharoaveda, and his minister Kandarīta of the Sāmaveda. Brahmadatta's græt-grandson Janameisya Dur-

buddhi, the last king, was a tyrant and was killed by Ugrāyudha of the Dvimīdhas, and the dynasty came to an end.

2. Pauravas

As noted above, the Pańchāla king Sudāsa overthrew Sanivaraņa, the Paurava king. The latter fied to Sind and then recovered his kingdom through Vasishtha's help. Sanivaraṇa had by Tapati a son named Kuru, who was a renowned king raising the Paurava realm to great eminence. Kuru is said to have sacrificed at Prayāga which indicates that he extended his sway up to that place after subduing the intervening South Pańchāla territory. Kurukshetra and Kurujāngala, the cultivated and uncultivated portions, respectively, of Kuru's territory, have been regarded by Pargiter as being named after this Kuru. Sanivar was celebrated for his righteous rule, and Kurukshetra was regarded as a religious place. He was so much esteemed that his successors were called Kurus or Kauravas after him, the term sometimes being applied also to the people of the realm.

There is some confusion in the Puranic texts with regard to Kurn's immediate successors. The collated text³⁹ suggests that Kuru had three sons, Parikshit, the eldest, Jahnu, and Sudhanvan. Parikshit had Janamejaya as his son, and the latter's sons were Srutasena, Ugrasena, and Bhimasena; but nothing further is said about them. The accounts then pass on to Jahnu's son Suratha and his descendants, who thus appear to have continued the main Paurava (or Kuru) line. The succession of Jahnu's son Suratha on the main line indicates that Janamejaya's branch lost the sovereignty. A story is told how Janamejaya lost his throne.⁴⁰ Janamejaya injured the sage Gārgya's son and was cursed by Gārgya. Indrota Daivāpa Saunaka performed a horse-sacrifice for him, which absolved him of his sin, but he could not recover his sovereignty and hence his three sons do not appear in the accounts

The line of Sudhanvan, the youngest son of Kuru, bifurcated into the Chedi and the Magadha branches, founded by his fourth successor Vasu. The kingdom held by the main Paurava line appears to have declined, and there was no ruler in this line to revive the Kaurava fortunes till the time of Pratipa, who was a famous ruler. Pratipa had three sons, Devāpi, Bāhlīka, and Santanu. The eldest Devāpi was a leper, and hence could not become a ruler. The second Bāhlīka resigned in favour of Santanu, who thus succeeded Pratīpa. The epic gives various legends about Santanu. Santanu married Gangā, and Bhishma was born to them. Bhishma, whose original name was Devavrata, vowed to remain celibate all his life and renounced his right to the throne in favour of his younger brothers in order to enable his father to marry Satyavati. Bhishma is a celebrated figure in the galaxy of Indian herces. He was a great warrior, an

able administrator and well versed in politics, science of war, etc. Ugrāyudha of the Dvimīḍhas attacked the Kauravas but, as noted above, Bhishma killed him and reinstated Pṛishata, the son of the late ruler of North Pañchalas, whom Ugrāyudha had driven out.

To Santanu were born Chitrangada and Vichitravirya from Satyavatī Chitrāngada was killed while fighting against the Gandharvas and Vichitravīrya succeeded him on the throne. But Vichitravirya died young without leaving any issue, and the queen of Vichitravīrya had through Niyoga (levirate) two sons from Vyāsa, viz. Dhritarashtra and Pandu. Dhritarashtra, the elder, being born blind. Pāndu was crowned king of Hastināpura while the veteran Bhīshma looked to the affairs of state. Dhritarashtra married Gandhari, and had by her a hundred sons, chief of whom were Durvodhana. Duhsasana, etc. Pandu married Kunti or Pritha, daughter of Kuntibhoia and an aunt of Krishna, and Mādrī, sister of Salva, the Vāhīka king. After his marriage with Madri. Pandu started on his campaign of conquest. He vanquished the Dasarnas, the kings of Mithila. Kāśi, Suhma, and Pundra and extended the Kuru dominions.41 While engaged in hunting. Påndu killed a sage in the form of deer and was cursed. In repentance, Pandu left his kingdom and went along with his wives to the Himalayas for performing penance. There Kunti gave birth to Yudhishthira, Bhīma, and Arjuna who are, in reality, said to be respectively the sons of Yama, Vayu, and Indra; and Mādrī, to the twins Nakula and Sahadeva from the Aśvins. Pāndu died in the hermitage, and Mādrī, burnt herself along with him on his funeral pyre. Thereafter, Kunti returned to Hastinapura along with the five sons. Dhritarashtra assumed the reins of government in the meanwhile and appointed Yudhishthira, the first-born among the Kuru family, as the crown prince. Though the sons of both Dhritarashtra and Pandu were Kauravas, the term was restricted to the sons of Dhritarashtra, and Pandu's sons were called Pandavas.

Chedi and Magadha: Vasu, the fourth successor of Sudhanvan, conquered the Chedi kingdom from the Yadavas and founded a dynasty there, whence he obtained the epithet Chaldyoparichara (overcomer of Chaidyas). His capital Suktimati lay on the river Suktimati (the Ken). Vasu was a samrā; and a chakravartin and extended his sway over adjoining Magadha, and possibly over Matsya also. He had five sons, among whom he divided his territory, establishing them in separate kingdoms. Magadha came as the share of his eldest son Brihadratha. Kuśa was given Kauśāmbl, Yadu had Karūsha, and Pratyagraha got Chedi. Probably the last son got Matsya which adjoined Chedi in the north-west.

With Brihadratha establishing himself in Magadha, with Girivraja as his capital, and founding the famous Bärhadratha dynasty, Magadha becomes a prominent factor in traditional history. Jarāsandha in the Bärhadratha line was a very powerful king, and under

him Magadha rose to great prominence. He extended his territories as far away as Mathurā, where Kainsa, the Yādava king, who was his son-in-law, accepted his suzerainty. Kainsa tyrannized over his people and was killed by Kṛishṇa who placed Ugrasena on the Mathurā throne. Enraged at this, Jarāsandha led many a campaign against Kṛishṇa and the Bhojas of Mathurā, defeating them several times. Though the Yādavas could withstand Jarāsandha for a time, they decided to migrate in a body south-westward as they were afraid of a complete rout at his hands. They then established themselves in the west coast with their head-quarters at Dvārakā under Kṛishṇa. Jarāsandha was killed by Bhīma, the Pāṇdava, and his son Sahadeva became an ally of the Pāndavas.

3. Yādavas

The large Yadava kingdom ruled over by Bhīma Sātvata was divided among his four sons, Bhajamana, Devavridha, Andhaka, and Vrishni. Bhajamāna's descendants appear to have attained no distinction. Devāvridha was connected with the river Parnāśa (Banās in West Mālwā), and his descendants were the Bhoias of Mārttikāvata, apparently in Śālva country around Mount Abu. Andhaka, who reigned at Mathura, had four sons, but only Kukura and Bhajamana are important. From Kukura were descended the Kukuras who formed the main dynasty down to Kamsa. Bhajamana's descendants were known as Andhakas, and they ruled somewhere near Mathurā. An important king in the line was Kritavarmā, the son of Hridika, who fought on the side of Durvodhana and was one of the three on the Kauravas' side who survived the Bharata War. Thereafter, he went to Dvārakā and later was killed by Sātvaki in the fateful fratricidal struggle that brought the downfall of the Yadayas. Vrishni had at least four sons, the eldest and the youngest having the same name Anamitra. From them arose numerous families. From Anamitra or Sumitra, the eldest, was born Nighna. and his sons Prasena and Satrājit succeeded him. Satrājit is a wellknown figure in the Syamantaka legend connected with Krishna, and was the father of Satvabhāmā, one of the eight principal queens of Krishna. Devamidhusha in the line married an Ikshväku princess named Asmaki and a son named Sura was born to him. From Sura and his queen, a Bhoja princess named Mārīshā, were born ten sons and five daughters including Vasudeva who was the eldest, and Pritha, Srutadevā, and Srutaśravā. Prithā was adopted by the old king Kuntibhoja from whom she came to be known as Kunti. She married the Paurava prince Pandu, and was the mother of elder Pandavas. Srutadeva married a Karusha king named Vriddhasarmā, Srutasravā was given to the Chedi king Damaghosha, and Siśupāla was born to them. Vasudeva married the seven daughters (Devaki, etc.) of king Devaka of the Kukuras, and Balarāma and Kṛishṇa were the sons of Vasudeva. Vasudeva's daughter Subhadrā married Arjuna, the Pāṇdava, to whom Abhimanyu was born from her. Abhimanyu's son was Parikshit who occupied the Hastināpura throne after the Bhārata War. The descendants of Anamitra, the youngest son of Vṛisniṇ by Mādrī, are called Śainyas through his son Sini. Sātyakl and Yuyudhāna were born in this family.

Ahuka among the Kukuras had, by a Kāśi princess, Devaka, Ugrasena. and other sons. Devaka had four sons and seven daughters (Devaki, etc). Krishna was born of Devaki. Ugrasena had nine sons and five daughters, Kańsa being the eldest. Kańsa usurped the throne after imprisoning his father. Vasudeva was his minister. Kańsa killed seven children of his cousin Devaki, relying on a prediction that her eighth issue was destined to be his slayer. Kṛishṇa and Balarāma were brought up in Gokula and Vrindāvana. Kṛishṇa killed Kańsa and reinstated Ugrasena on the Mathurā kingdom as already stated.

Krishna being the central figure in this epoch, we shall briefly deal with his life and historicity 42 Krishna was born in the prison cell at Mathura, but immediately after birth was removed to Gokula on the other side of the Jumna with the aid of the prison warders and others who were dissatisfied with the tyrant Kamsa He was brought up in Gokula as the child of Nanda and Yaśoda, whose daughter was substituted for Krishna and was later killed by Kamsa As a child, Krishna appears to have been endowed with extraordinary gifts and passed through many adventures. His childhood was spent in Gokula and various incidents connected with his youth are recorded in the Puranas and other texts. The incidents are presented in the garb of myths and miracles, but there may be a real basis for some of them. A few years after Krishna's birth, the cowherds left Gokula on account of an onrush of ferocious wolves and settled in Vrindāvana, where Krishna subjugated Kāliva, a Nāga chief, and ordered him to leave the place with his tribe. In Vrindavana, in place of the usual Indravajña, Krishna established the practice of worshipping nature. Krishna's extraordinary exploits, widespread popularity, and great fame reached the ears of Kamsa, and he planned to kill, through his wrestlers, the Vrishni princes Krishna and Balarama, after inviting them to Mathura to visit his court and attend a wrestling bout. Krishna and Balarama, however, killed the prize fighters. Krishna then slew the tyrant Kamsa himself, and re-instated Ugrasena on the Mathura throne. Thereafter, Krishna and Balarama left for Kāśi for their education, but had to return soon on account of the invasion of Mathura by Jarasandha, the Magadha king, who was enraged at Kāmsa's death, the latter being his son-in-law. Jarasandha's invasions were resisted for

some time, but finally the Yādavas decided to leave Mathurā in a body and settled in Dvārakā on the west coast.

Kṛishṇa appears for the first time in the Mahābhāṇute story at the Svayanivara of Draupadi. He was a friend and counsellor of the Pēnḍawas, and his sister Subhadrā was maried to Arjuna. King Jarāsandha of Magadha was killed by Bhīma under Kṛishṇa directions. At the rājarāya performed by the Pāŋdawas, Kṛishṇa was offered the first worship. This emraged the Chedi king Siśuṇāla who heaped vile abuse upon Kṛishṇa and was killed by him. After the period of the Pāŋdawas' exile was over, Kṛishṇa acted as their emissary of peace to Duryodhana, but all his efforts at conciliation proved futile. In the great Bhārata War, Kṛishṇa offered his personal help as a charioteer to Arjuna, while his army joined the Kaurawas. Kṛishṇa helped the Pāṇḍawas a number of times during the great war. In fact it was mainly, if not solely, due to the important part played by Kṛishṇa in the great war that the Pāṇḍawas emerged victorious.

Krishna returned to Dvārakā after Yudhishthira was installed on the Hastinapura throne. He revived the stillborn child of Abhimanyu's widow Uttarā, later known as Parīkshit. The last meeting of Krishna and the Pandavas was at the latter's Asyamedha wards the close of Krishna's life there was a fratricidal struggle among the Yadavas in which practically the entire Yadava males were destroyed Then Krishna sent a messenger to Hastinapura inviting Ariuna to come to Dyaraka and look after the women and children, and asking them to accompany Arjuna, Krishna retired to the forest. Aruna came to Dyaraka, took with him the remnants of the Yadu family, and installed Vajra, the only surviving grandson of Krishna, on the throne of Mathura. Krishna, when in deep meditation, was hit by the arrow of a hunter who mistook him for a deer. Thus passed away one of the grandest figures in ancient India. There is now a general consensus of opinion in favour of the historicity of Krishna. Many also hold the view that Väsudeva, the Yadaya hero, the cowherd boy Krishna in Gokula, the counsellor of the Pandayas, and the great philosopher of the Bhagayadgita, or in short Krishna of the Puranas and Krishna of the Mahabharata were one and the same person.43 The deification of Vasudeva Krishpa as an incarnation of Vishnu must be dated before the period of the Mahābhāshya (i.e. second century B.C.).

4. Eastern Anavas

Under the suzersiinty of Jarāsandha, king of Magadha, Anga came to be ruled for some time by Karpa, who was a faithful ally of the Kauravas, and one of the principal actors in the Great Epic of India. Among the galaxy of epic heroes Karpa occupies a very high position, and his real worth has not been fully appreciated as

he is looked at with prejudice on account of his becoming a staunch supporter of Duryodhana. Ill-luck seems to have pursued Karna from his very birth, when he was deserted by his mother Kunti, as he was born, when she was still a maiden, from the Sun God. He was thus in reality the eldest of the Pandavas, but being brought up by a Sūta, he met with slights and insults at every stage in his life. His so-called low birth came in the way of his being ranked as fit to compete with Arjuna. Duryodhana at once crowned him the king of Anga, and thus began a cordial friendship which made Kama the strongest supporter of the Kauravas, whose every cause he championed with thorough wholeheartedness. Karna met with his end not because he was beaten, nor on account of his being inferior to Ariuna in any way, but he was the victim of his own greatness, and destiny was always against him. He is indeed a unique hero who should be admired for his magnanimity, unflinching devotion to the cause he championed, valour, skill, and truthfulness. Vrishasena was the eldest of the sons of Karna; but along with his five brothers. he was killed in the Bharata War.

5. The Solar Dynasty

After Rāma's time, Ayodhyā plays no important part in traditional history. Kuśa, Rāma's son, who became the ruler of south
Kosala with his capital at Kuśasthali, appears to have extended the
Aryan culture in the Vindhya regions. The story of Kuśa's marriage
with a Nāga princess shows how he spread the Vedic culture among
the aborigines. The next important figure after Kuśa is Hiranyanābha Kausalya who is described as a disciple of Jaimini from whom
he learnt the science of Yoga. The last Solar king of the pre-Bhārata
War period was Brihadbala who led the Ayodhyā forces against the
Pāṇdavas. Though Bhīma conquered him before the Rājasūya,
Brihadbala was subsequently subjugated by Karņa and hence he
fought at the head of the Kaurava forces. Brihadbala was killed
by Abhīmanyu in the Kurukshetra war.

10. THE BHARATA WAR (c. 1400 B.C.)

1. Kauravas and Pāndavas**

All the young Kuru princes received training in arms from Kṛipa and Drona, where Aśvatthāman and Karņa were their studymates. Bhīma and Duryodhana specialized in club-fighting and wrestling, Nakula and Sahadeva in fencing, Yudhishthira in chariot fighting, and Aśvatthāman in magic arts. Arjuna was not only the best archer but excelled all in every respect. But Karņa was Arjuna's equal in archery. On completion of their training, Drona demanded as his fees the defeat and capture of the Pafichāla king Drupada who had insulted him as his co-student. The Kuru princes marched against Drupada and vanquished him. Drona made peace with Drupada by leaving South Pafichāla to him and taking North

Pañchāla for himself. Dhritarāshtra's sons, through jealousy, set on foot various plots in order to destroy their cousins, but the Pandayas escaped unburt through all these traps. After their safe escape from the lac house at Vāranāvata, the Pāṇḍavas started on a journey in the guise of Brahmanas. They came to Kampilya, and on Ariuna's successfully accomplishing the feat imposed as a test in the Svayamvara of princess Draupadi of Panchala, daughter of king Drupada, she became the common wife of the five Pandaya brothers. Hearing of the successes of the Pandavas. Dhritarashtra called them back to Hastinapura and gave them the Khandava-Prastha desert. The Pandavas founded Indraprastha and made it their capital. Owing to breach of a self-imposed rule. Ariuna went on a voluntary pilgrimage for twelve years during which he contracted marital alliance with Chitrangada, princess of Manipur, and Subhadra, the Yādava princess, sister of Krishna. The Pāndavas burnt down the whole of Khandava jungle, saving the life of Maya Asura, who in gratitude erected for them a wonderful assembly hall. Then Yudhishthira decided to perform a Rajasūva sacrifice as the emblem of sovereignty. As a preliminary to the sacrifice, the other four Pandaya brothers set out on conquering the whole earth. King Jarasandha of Magadha was their greatest opponent and challenger, and under the advice and guidance of Krishpa, Bhīma killed Jarāsandha in a duel. Jarasandha's son Sahadeva was installed on the Magadha throne and he became an ally of the Pandavas. Bhīma, Artuna, Nakula, and Sahadeva led campaigns respectively towards the east, north, west, and south. The descriptions of these conquests throw much light upon the countries and peoples of the days of the Mahābhārata, though at places there are myth and anachronism. Numerous kings including the Kauravas were invited to the Rajasuya, and Krishna was offered the first worship therein. The Chedi king Sisupāla objected, and in the quarrel that followed, was killed by Krishna. It was after the Rajasuya when Duryodhana was inspecting the Sabhā or Assembly Hall built by Maya that the seeds of the Bharata War were deeply sown. The rapid rise of the Pandavas was an eyesore to the Kauravas and they hit upon a plan to oust them from their kingdom. Taking advantage of the Kshatrive code of conduct that one should not refuse, when invited for a duel or for a gambling-match, Duryodhana called on Yudhishthirs for a game of dice, in which the latter staked everything including Draupadi, and lost it. The denuding of Draupadi occurred after this game of dice. From hot words, the princes were coming to blows, but old Dhritarashtra let off the Pandavas. Soon afterwards the second game of dice was played in which the stake was that the loser should spend twelve years in the forest, and the thirteenth incognito. The Pandavas lost this game also, and had to leave for the forest. Draupadi accompanied them. During the thirteenth year, Pāṇḍavas stayed in the Matsya country in disguise. There they helped the Matsya king Virāţa against the attack of the Kauravas. Virāţa's daughter Uttarā was married to Abhimanyu, the son of Arjuna. After completing the full period, seeing that war was inevitable, each party tried to enlist as many sympathusers as possible. Krishṇa himself sided with the Pāṇḍavas but his forces fought on the side of the Kauravas. Salya was won over by Duryodhana. Druṇada's priest was sent to the Kauravas on behalf of the Pāṇḍavas for negotiations, and finally Krishṇa himself went as an ambassador of peace. But Duryodhana was adamant and refused to part with even a particle of earth. Thus began the Great War which may be regarded as the greatest event in the prehistoric age of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and forms the theme of the Great Evic Mahābhārat of India and India Mahābarat of India and India Mahābhārat of India and India Mahābarat of India and India Mahābhārat of India and India Mahābarat of India and India Mahābhārat of India Andrea Mahābarat of India and India Mahābhārat of

2. Bhārata War

The epic gives a long list of princes on each side. The Kauravas had eleven divisions under them as against the seven of the Pandayas. Towards the east, out of the old Magadhan empire, only western Magadha ruled by Jarasandha's son Sahadeva was on the Pāndava side. All the rest, viz. eastern Magadha, Videha, Anga, Vanga, and Kalinga, which were under Karna, joined the Kaurava forces. The Kirātas under Bhagadatta, ruler of Prāgivotisha, also were under the banner of the Kaurayas, so that practically the whole east supported them. In Madhyadesa, the rulers of Vatsa. Kāśi, Chedi, Karūsha, Daśārna, and Pañchāla figured among the supporters of the Pandavas, while Brihadbala, king of the Kosalas, went to the opposite camp. The Yadavas were divided in their allegiance. Krishna was the non-combatant adviser of the Pandayas and Balarāma remained neutral. Yuyudhāna and Sātyaki, among the Vrishnis and Yadavas, came to the Pandavas, while Nila of Mähishmati, Vinda and Anuvinda of Avanti, Kritavarman of the Bhota-Andhaka-Vrishnis, Vidarbha, Nishada, and Salva supported the Kaurava forces. In the Punjab and the north-west, Javadratha of Sindhu-Sauvīra who was the brother-in-law of the Kauravas. Sakuni of Gandhara, Susarma of Trigarta, Kekaya, Sibi, Salya of Madra (related to the Pandavas), Vahlika, Kshudraka, Malava, Sritāyu of the Ambashthas, and Sudakshina of the Kambojas, were in the Kaurava army; only Abhisara, which formed the south-western part of Käshmir is said to have joined the Pandavas. Thus, the Pandavas' supporters were Panchalas, Matsya, Chedi, Karusha, Western Magadha, Kāśi and south-western Yādavas. Under the Kaurayas came practically the whole of eastern India, the whole of north-west, Kosala, Vatsa, and Sürasena in the Madhyadeśa, and Māhishmatī, Avanti, and Sālva in the west. In short, broadly speaking the Madhyadesa and Gujarat stood for Pandayas and the rest, viz. east, north-west, and western India, opposed them. The Pandava army encamped near Upeplavya, the capital of the Matsyas, and the Kaurava forces were gathered near Hastināpura. Last minute efforts were made for an aminable settlement, but the negotiations proved fuile, and the great battle was fought on the famous field of Kuruksheira.

Dhrishtadyumna, son of Drupada, was appointed the Commander-in-Chief of the Pandavas and Bhishma led the Kauravas. The two hosts were bound to follow certain rules of war traditional among the Kshatriyas. Only opponents of equal birth and armed with the same kind of weapons were to fight each other. None was to fight without first challenging his opponent. Those engaged in personal combat with another, and those who surrendered, as well as the fugitives and non-combatants were to be spared. The venerable Bhishma commanded the Kaurava forces during the first ten days of war. It was only through the arrows discharged by Arjuna against Bhishma under the cover of Sikhandin (whom Bhīshma did not fight, Sikhandin being originally a woman) that on the tenth day Bhishma fell down headlong from his chariot. Drona was consecrated the next commander, and he carried on the fight till the fifteenth day. Abhimanyu was killed on the thirteenth day and Ghatotkacha, the demon son of Bhīma, on the fourteenth. Drupada and Vırāţa were killed by Drona on the fifteenth day, and finally that evening Dhrishtadyumna killed Drona, while in deep sorrow on hearing the false news of the death of his son Aśvatthāman. Karna was the next commander. His turn lasted only for two days during which Bhima tore open Duhśäsana's breast. Karpa was killed by Arjuna. Salva became the commander on the eighteenth or the last day of the battle. He was killed Yudhishthira by about mid-day, while Sahadeya killed Sakuni. The entire host of the Kauravas was thus completely annihilated and Duryodhana fled to a pond where the Pandavas challenged him. In the club-fight against Bhīma Duryodhana's thighs were smashed and he dropped down bleeding. Duryodhana appointed Asvatthaman as the last commander who, with the help of the other two survivors from among the Kaurava heroes, viz. Kripa and Kritavarman, stealthily entered into the Pandava camp at night and slaughtered the surviving Pandaya princes and Dhrishtadyumna while asleep. With the death of Duryodhana perished all the male members of his large family except his old and blind father. The Pandavas emerged victorious, but besides the five Pandava brothers, Satyaki was the sole survivor on their side. Thus the victory, though complete, was won at a very high cost.

The Kuru line being extinct with the death of the hundred sons of Dhṛitarāshṛra, Yudhishthira became king of the Kurus and ruled at Hastināpura. Later on Yudhishthira performed a horse-sacrifice on Yvāsa's advice in order to purge himself of all sins. Arjuna was

placed in charge of the horse and the secrifice was completed with due ceremonial. Dhritaräshtra retured to forest with Gandhári after a few years and was consumed in a forest conflagration. Yudhashthra, however, did not reign long. Some years after the Bhārata War, the Vṛishnis and Yādavas of Gujarāt perished in fratricidal strife and Kṛishna died. Arjuna was sent to bring the survivors of the Yādavas, but on his way back he was attacked and defeated by the Abhīras. Arjuna returned to Hastināpura with Kṛishna's grandson Vajra, and placed him at the head of the people who followed him from Dvārakā. Thereafter Yudhishthira abdicated and retired to the forest along with his brothers, placing Parikahit, Arjuna's grandson, on the throne.

The accession of Parikshit marks the beginning of the Kali Age, as the Dvāpara Age is said to have closed with the Bhārata War. In the Puranic accounts also "the past" ended, and "the future" began, at the close of the Bhārata War which was an epoch-making event in the annals of the country. The dynasties of the Kali Age in the Purāṇas begin with the accession of Parikshit, though some begin their accounts after Adhisimakṛishṇa, fourth in descent from Parikshit.*

The traditional accounts do not state how the family feud in the Kuru family was turned into an all-India affair, so that every ruling dynasty of any note during the period, howsoever far from Kurukshetra, is represented as having participated in the war. The nonmention of the Bhārata War in later Vedic Literature does not necessarily disprove its historicity. For one thing, it was a purely political contest, and hence naturally did not interest the authors of the Brahmanas.46 An argumentum ex silentio is seldom conclusive. Again the Pandus, according to traditions, were not a body of strangers, but were scions of the Kuru family. The very significance of the term Pāṇḍavas, as distinct from the Kauravas, was forgotten soon after the war, and the term Kurus alone survived. Though the Mahabharata, in its present form, is a late production, the kernel of the story takes us back to the period between 1400 and 1000 B.C. when, as noted above, the battle was probably fought. The Aśvalāyana Grihya-sūtra (III. 4. 4) refers to the Bhārata and Mahābhārata, and Sānkhāyana Srauta-sūtra (XV. 16), to the disastrous war of the Kauravas. Panini refers to the heroes of the Bhirata War as already objects of worship. All these clearly prove the antiquity of the story of the Mahabharata.

II. COMPARATIVE VALUE OF THE VEDAS AND THE PURANAS AS SOURCES OF TRADITIONAL HISTORY

There is a difference of opinion among scholars as to the comparative value of the Vedic texts and the Pursaas in regard to the historical data supplied by them. Keith is excessively sceptical

about the historical value of the Purāṇas and is doubtful regarding the historicity of any event which is not explicitly mentioned in the Riguede. Pargiter goes to the other extreme and gives more weight to the Puranle tradition than to the Veduc evidence, which he styles as the tradition of the Brākhmaṇas who possessed no historical sense. The so-called Kshatriya tradition, however, is hardly an unpolluted source of history. Priority of date and comparative freedom from textual corruption are doubtless two strong points in favour of Vedic texts. The evidence of the Purāṇas, on the other hand, cannot be ruled out altogether, because despite a good deal of what is untrustworthy in them, they alone contain something like a continuous historical narrative, and it is absurd to suppose that the elaborate royal genealogies were all merely figments of magination or a tissue of falsehoods.

But the theory which pronounces the Puranas as representing Kshatriya tradition as distinct from, and superior to, the Brahmana tradition contained in the Vedic texts, does not appear to be correct. The theory is mainly based on two assumptions: (1) that the heroes of the legends and stories in the Puranas are Kshatriva kings who mostly do not figure in Vedic literature, and (2) the transmission of their history was entrusted to Sütas of Kshatriya origin. There is hardly any foundation for these beliefs. The Sūta was not a non-Brahmana but a venerable sage. As regards the so-called Kshatriva traditions, there have never been in India two such watertight compartments as the Brahmana tradition and the Kshatriva tradition. Even in the works distinctly assigned to Kshatriya tradition by Pargiter, we find the glorification of the Brahmanas, and the so-called Brahmanic literature abounds in Kshatriva legends. The Puranas themselves assign a comparatively small portion to genealogical accounts, the genuine Kshatriya tradition according to Pargiter: their main bulk deals with Vedic and Brahmanic lore. Moreover, the Puranas follow the Vedic religion and take pride in styling themselves as the "fifth Veda." The earliest reference to the Puranas, as observed by Keith, is for a point of Brahmanical lore and not for a point of genealogy or history.47 Again, even according to Pargiter, the Puranas, as we have them now, are undeniably a Brahmanic compilation; so no part of it can be distinguished as Brahmanic or Kshatriya tradition.48 It would perhaps be more correct to say that these are not two distinct sets of tradition, but both are Brahmanical traditions, though produced under different environments and with different aims and objects.

Moreover, it may be observed that there is no irreconcilable contradiction or conflict between the Vedic texts and the Purānas. The Ripveda, as we have it, is a Kuru-Pañehāla product; naturally, therefore, the kings belonging to those class play prominent rôles in it and others find but incidental mention. Kings, who are men-

tionsed in the Vedic texts but are not found in the Puranic traditions, were possibly princes and chieftains of smaller dynasties, not preserved in the dynastic lists in the Puranas. There is also the possibility of the same person being referred to under different names in the two sets of traditional accounts. Some of the kings mentioned in the Rigueda can be fitted in the gaps in the Puranic lists, The Rgueda, no doubt, offers the proper corrective to the Puranic lists, but, when we find Puranic accounts to be corroborated by the Vedic evidence, it is legitimate to take their testimony as valid even in matters on which the Rigueda is silent. The proper procedure for the writing of traditional history is to take into account the joint testimony of the Vedic and Puranic texts wherever available, and to try to bring harmony into the apparently conflicting texts. The evidence of the Puränas in these matters needs very careful consideration.

A critical examination of the Puranic texts and Vedic literature reveals the fact that the Puranic genealogies in some cases refer to the same persons figuring in the Vedic literature. The Puranic data about some of the royal dynasties, kings, and Brāhmaṇa families find confirmation in Vedic literature, and there is no basis for the view that there are hardly any points of contact between the Vedic and Puranic traditions. Here we shall briefly refer to the important persons who appear in both Vedic literature and the Purāpas.

The Rigueda mentions Yayāti as an ancient sacrificer and a son of Nahusha, and he is also known as a seer of some hymns Buis is connection with the Lunar dynasty or with Pūru, Anu, Druhyu, Yadu, and Turvasu, as told in the Purāṇas and Mahābhārata, is not found in the Vedic texts, and hence Macdonell and Keith condemn the epic tradition as "inaccurate."

The names of the above five sons of Yayati, however, occur in the Rigneda as those of ancient tribes. The word Yadu occurs several times in the Rigveda as the name of a king and his tribe. He is closely associated with Turvasa and once with Druhyu, Anu, and Püru. The Mahābhārata and the Purānas indicate this association by making Turvasu the full brother of Yadu, and Anu, Druhyu and Püru, his step-brothers. The Riqueda also indicates the close connection of Yadu and Turvasa with north-western India. The five tribes Yadus, Turvasas, Anus, Druhyus, and Pūrus represent, according to one view, the Vedic Panchajanas. The Rigueda or Vedic literature does not corroborate the Puranic relationship of Yayati, son of Nahusha, with these five princes, though Yayati, the son of Nahusha, as noted already, is well known to Vedic texts. The Purus appear in the Rigveda as the enemies of Sudas and they dwelt on the Sarasvati. It appears from the Rigueda that the Purus had sometimes friendly and sometimes inimical relations with the Tritsus to whom Sudas belonged. There is nothing to show any

connection between Vedic Püru or Purukutsa and Puranic Püru, son of Yavāti.

The Solar king Māndhātri appears to have been referred to as Māndhātri Yauvanāśva in the Gopatha Brāhmaņa, the identity being further strengthened by the fact of both being the sons of Yuvanāśva. 50

The interpretation of the famous Dāśarājāa (battle of ten kings) of the Rupveda in treaditional history supplies us with many interesting and important synchronisms, and the importance of the problem demands treatment at some length.

We have already seen that Mudgala, the eldest of the five Pańchālas, was the founder of the main branch of the north Pańchālas, and among his descendants were Vadhryaśva, Divodšsa, Mitrayu, Maitreya Soma, Sriñjaya, Chyavana Pańchajana, and Sudäsa or Somadatta. There is no consistency among the different texts with regard to these names, Sudäsa being in some Puranas replaced by Somadatta. Despite these difficulties, Pargiter and other scholars identify Divodäsa and Sudäsa in these lists with their namesakes in the Rigveda and see in the account of Samvarana in the Mahābhārata²⁻¹ the reference to the battle of ten kings in the Rigveda which resulted in the defeat of the Püru king.

Pargiter points out that Mudgala, Vadhryaśva, Divodāsa, and Sriñjaya are mentioned in the Rigoeda hymns. Chyavana is probably meant in one hymn and his other name Pañchajana is no doubt a misreading of Pijavana. Sudāsa is called Sudās Paijavana. The Aitareya Brāhmaṇa says that Sahadeva was descended from Sriñjaya, and one hymn (RV, IV. 15. 7-10) says that Somaka was his son. The hymns agree with the genealogies in all these particulars. Chyavana was a great warrior and his son Sudāsa extended his dominions. They probably conquered the Dvimīḍha dynasty and the south Pañchālas, as there appear to be gaps in the genealogical lists of these dynasties at this period.⁶²

According to Pargiter, "Sudās drove the Paurava king Samans of Hastināpurā out, defeating him on the Jumna. His conquests stirred up a confederacy of the neighbouring kings to resist him—Pūru (Samvaraṇa), the Yādava (the Yādava king of Mathurā), the Sīvas (Sīvis, who were Ānavas), Druhyus (of Gāndhāra), Matsyas (west of Sūrasena), Turvasa (the Turvasu prince, apparently in Rewa) and other smaller states. Sudās defeated them in a great battle near the Parushņi (Ravi), and Pūru (Samvaraṇa) took refuge in a fortress near the Sindhu (Indus) many years." 53

It may be stated at the outset that despite many differences between the Vedic account on the one hand and that given in the Mahābhārata on the other, it is undisputed that the heroes of the Dādarājfia flourished at the period which has been assigned to Sudāsa-Somadatta of the north Pañchāla line and to Samvaraņa and Kuru of the Paurava line. Dr. Pradhan has arrived at the same conclusion of the identity of Vedic Sudās with the Paūchāla Sudāsa after independent enquiry starting on different synchronisms. It has also been shown that Kuru and Sarivarana were contemporaries of Tura Kāvasheya whose father Kavasha Alūsha figured in the Dāśarajān. The discrepancies that we notice in the Vedic account and the accounts in the Purāṇas and the Mahā-bhārata only show that traditional history, though based on a kernel of historical facts, is not only not infallible but inaccurate at times, and its credibility requires to be tested in the light of contemporary Vedic evidence. The details of the Dāśarājā as given in the Rigueda no doubt are a first-hand contemporary account. The accounts in traditional history were pieced together out of the remnants of ancient tales, legends, etc. at a later date when memories of actual events were but faint and inaccurate.

Now, apart from the fact that the geographical boundaries do not concur in the Vedic and Puranic accounts (as will be shown presently), it will be seen that there are many particulars that apparently speak against the proposed identification. In the first place, though the Rigveda mentions Mudgala and Sriniava, it does not indicate any relationship between them and Sudas Secondly. the Rigyedic Sudas is distinctly called the son of Pijayana whereas the Puranic Sudasa had Chyavana-Panchajana for his father. Yaska, Mahābhārata and Manu know Pijavana to be the father of Sudās, and hence the Puranas cannot be said to have mistaken Panchajana for Pijavana as suggested by Pargiter. 56 It seems that the title Panchajana has been given to Sudasa in his capacity as the leader of the five tribes. Further discrepancies are found in the non-mention in the Rigueda of the important tribes of the period according to the Puranas such as the Satvatas, the Bhojas, the Videhas, the Ikshvākus, etc., either among the allies or among the adversaries of Sudas. Among the tribes mentioned in the Rigueda as participating in the Dāśarājāa, Turvaśas, according to traditional history, had long ceased to exist, having merged in the Pauravas. The Tritsus. who were the principal helpers of Sudas according to the Rigveda, are not to be found at all in the Puranic tradition. Matsyas, one of the opponents of Sudas in the Rigveda, emerge in traditional history only nine generations after Sudasa. The Puru adversary of Sudas has been named Purukutsa in the Rigueda whereas according to traditional history he comes to be Samvarana of the Pauravas. It is further curious that the Mahābhārata does not mention Sudāsa by name at all, but refers to him only as Pāńchālya (a king of the Panchalas). The scene of the bettle has not been mentioned in the Mahābhārata or the Puranic texts. The Rigueda represents the battle to have been fought on the banks of the Parushni. This location of the conflict, however, seems to be most difficult, if not quite

impossible, if we consider the territories occupied by the different members of the confederacy at the period, according to traditional history. The Druhyus were occupying Gandhara at the time, and it is difficult to see how they could be interested in or affected by the conflicts of people far away from them. The Turvasas, as already stated, did not exist at the time; and even if they did exist, as suggested by Pargiter, it is difficult to comprehend how they marched off over 500 miles from the Karusha country to participate in the exploits of a remote king. The geographical knowledge of the period of the Rigveda (as seen in Ch. XIII) did not extend much beyond the Ganges and Jumna or Saravu to the east, and only up to the Vindhyas in the south; but the period of Sudasa in traditional history, which comes after that of Dasaratha and Rama, indicates knowledge of practically the whole of India. The truth underlying these discrepancies between the Vedic and the Puranic and Mahābhārata accounts seems to be that the Puranic tradition "is patching up its genealogical fabric from whatever shreds of floating knowledge it comes across without any means of checking,"57 This does not certainly mean that the Vedic and the Puranic Sudasa were quite distinct personalities. When we take into consideration that the Vedic and traditional accounts agree admirably with regard to the chronology of the period of the conflict, it appears certain that the similarity of names is not a mere coincidence. There are serious discrepancies, no doubt, when we come to the locations and political environments of the different participants in the conflict. But the mistake is due to the lack of definite knowledge on the part of chroniclers of traditional history. It may also be observed that the Mahābhārata account simply refers to the driving out of the Paurava king Samvarana from his kingdom by the king of the Panchalas. At the distance of time between the Dasarajña and the composition of the Mahabharata, the chroniclers remembered only the utter rout of the Paurava king at the hands of a Panchala king.

Another important problem is the identity of Janamejaya Parikshita mentioned in the Vedic texts and in the Purapas and the Mahābhārata. The Purapas and the Mahābhārata refer to two Janamejaya Pārikshitas, one an ancestor of the Pāṇḍavas (being grandson of Kuru), and the second, a successor of the Pāṇḍavas (grandson of Arjuna).

On account the similarity of patronymic as also of the names of his brothers, the earlier Janamejaya is confused with the later Janamejaya and there has been transference of tradition.

The Aitoreya and the Satapatha Brāhmaņa enumerate Janamejaya as the performer of the Aśvamedha sacrifice.⁵⁰ The very fact that Bhishma narrates the story of Janamejaya's Aśvamedha to Yudhishthira as an ancient legend clearly shows that the Aśvamedha referred to was performed by the ancestor of the Pāṇḍavas, and

proves that a Janamejaya Pärikshita before the Pändavas' time was a real person and not a shadowy figure as Dr. Raychaudhuri would have us believe.50 The descendant of the Pandavas is credited with the performance of the Sarpasatra and not an Asvamedha. Asvamedha started by the later Janameiava was not completed.60 The Brähmanas further mention Tura Kavasheva as the priest who ancinted Janameiava with Aindra Mahabhisheka, and Tura Kavasheva can be proved to be contemporaneous with Janameiava the ancestor of the Pandavas. Kavasha Ailūsha, father or grandfather of Tura, was drowned in the Dāśarājña, so that he was a senior contemporary of Kuru, son of Samvarana, who lived during the Dāśarājāa period.61 Janamejaya, who was the grandson of Kuru, was thus contemporaneous with Tura This sacrifice, with Tura Kāvasheva as priest, was performed for celebrating the attainment of imperial status by Janamejaya and not for atonement of any sin The Satapatha Brahmana refers to another sacrifice performed by Janamejaya Pārīkshita with the aid of Indrota Daivāpa Saunaka for ridding himself of a grievous sin which is described as Brahmahatuā (killing of a Brahmana).62 The Puranas and the Mahabharata do not associate Janameiava, the descendant of the Pandavas, with any guilt. That the ancestor was the person alluded to is clear from the fact that the story of the sin of Janamejaya is told by Bhīshma, and therein Janameiava is accused of unwittingly killing a Brähmana.63 This also proves that Indrota Daivāpa Saunaka flourished generations before the Bharata War. The Harivamsa refers to Janamejaya's killing the son of Gargya for insulting him, as the result of which Gargva cursed him.64 The Asvamedha performed by Indrota Daivapa Saunaka was to purge Janameiava of this sin. The incident of the chariot of Yavati related in the same story, which states that the chariot continued in the Paurava line till the period of Janamejaya, and after him was transferred to Vasu Chaidyoparichara, eighth descendant from Kuru, clearly shows that the reference in the story is to the ancestor of the Pandavas. The chariot then passed on to the Magadhas and came to Krishna after Jarasandha was killed. 65 All these preceded Janameiava Pārīkshita, the descendant of the Pāndavas, and hence the allusions clearly refer to the ancestor of the Pandavas. The Harivainsa clearly indicates that the Asvamedha story relates to the earlier Janameiava by making Janamejava (the descendant of the Pandavas) the auditor of the story which is told by Vaisampayana, who adds that there were two Janamejaya Pārīkshitas among the Pauravas.66

The references in the Vedic texts thus clearly prove the existence of a Janamejaya Pārīkshita who was an ancestor of the Pāṇḍavas, and the grandson of Kuru. The peace and plenty in the Kuru realm, alluded to in the Atharvavaedava and in the Brālmaṇalā, came as the result of Kuru's extensive conquests, and his son

Parikshit and grandson Janamejaya continued the good work started by Kuru. Janamejaya's heinous crime, however, deprived him and his successors of their kingdom which passed on to the younger branch (as already stated) and the Pārikshitas suffered extinction. The Brihadāranyaka Upanishad refers to the vanished glory of the Pārikshitas and enquiries as to their state in the next world.⁶⁸ To that the reply is given that they must have attained the state to which performers of Advamedha scriftces are eligible.

These and other co-ordinations of the incidents and persons mentioned in traditional history and the Vedic texts clearly show that the two traditions are neither independent nor contradictory; that the traditional history has its basis in facts and is not the product of imagination; that traditional history has mostly preserved ancient tradition; and that when supported by Vedic texts its evidence is unimpeachable. No excuse is therefore needed for the somewhat long historical account, given above, on the basis of Epic and Puranic tradition. It has been customary for the writers of Indian history to confine themselves, so far as the political history of the period is concerned, to the few isolated facts gleaned from the Vedic texts But we must not forget that "the Vedic literature confines itself to religious subjects and notices political and secular occurrences only incidentally so far as they had a bearing on the religious subjects." As Pargiter has very pertinently observed: "Ancient Indian history has been fashioned out of compositions, which are purely religious and priestly, which notoriously do not deal with history, and which totally lack the historical sense. The extraordinary nature of such history may be perceived, if it were suggested that European history should be constructed merely out of theological literature. What would raise a smile if applied to Europe has been soberly accepted when applied to India."68a

The force of these remarks is undeniable and no student of Indian history should ignore the legendary element in the Purāṇas and Epics. It is necessary to remember that, for reasons stated above, we cannot accept those traditions as genuine historical facts so long or so far as they are not corroborated by contemporary texts or other reasonable evidence. Until then we can treat them only as traditional history But such traditional history has its value, and is in any case a necessary preliminary step for the discovery of genuine history.

12. THE EXPANSION OF THE ARYANS AND ARYAN CULTURE

In one respect, however, it seems difficult to accept the traditional account without a great deal of reserve. This is the geographical background of the Aryan conquest of India as described in the Pursas.

The Purāpas say nothing about the original home of the Aryans. The scene of traditional history opens in India, with the division of the territory, comprising the whole of North India extending in the east up to Orissa, among the ten sons of Manu, the king and the common ancestor of the ruling families in India (ante, p. 276).

From this starting point, the traditional history enables us to trace the progress of Aryan advance during the four Ages—Krita, Tretā, Dvāpara, and Kali. Kings Sagara, Rāma, and Krishna are said to have flourished respectively at the end of the Krita, Tretā, and Dvāpara Ages, so that the Krita Age covers roughly 40 generations, Tretā 25 generations, and Dvāpara 30 generations (cf. App. II). The Kali Age set in after the Bhārata War.

By the end of the Kṛita Age, we find the Aryans in occupation of the whole of North India including Sind and Kandahār in the west, and Bihār and West Bengal in the east. In the south, Gujarāt, Kāthiāwār, the Western Coast south of Bombay and Berār were colonized by the Aryans, and their southern limits had extended beyond the Vindhya and the Narmadā down to the Tāpti and the Sātpurās.

While Parasurama is generally associated with the creation of Surpāraka near Bombay, a stanza in the Mahābhārata shows that it was colonized earlier by Jamadagnl.⁶⁹ Parasurāma is credited with the Aryanization of the whole of the western coast of Bombay, especially the Konkan, the Karhāra, the Tulava, and the Kerala. The traditions, at any rate, indicate the important rôle played by the Bhārgavas in the colonization of the Deccan.

The Aryan occupation during the Tretă Age extended further east and south, embracing, in addition to the territories occupied in the Krita Age, Orissa, Assam, Chhotā Nāgpur, Central Provinces, and some parts further south. The southern territories of Janashāna, Kishkindhā, and also Lahkā came under the sphere of Aryan influence during the days of Rāma.

By the time of the Bhārata War (c. 1400 B.C.) which marked the close of the Dvāpara Age, the Aryans had expanded over the whole of India, and even beyond its frontiers in the west.

This traditional account of the Aryan expansion is, however, in conflict with the evidence of the Vedic texts. As has already been shown in Ch. XIII, there are good grounds to suppose that by the time the Rigveda was composed, the Aryans had not penetrated much further into the interior beyond the frontiers of the Punjah and Räfputäns. If we remember that the Rigveda did not probably receive its final form long before the end of the so-called Dvänara Age, its testimony is decidedly fatal to the geographical views assumed in the Puñans.

But the Rigredic evidence does not stand alone. We have an account of the spread of the Aryan culture in the Brahmana period

in the story of Videgha Māthava (ante, p. 258-59). This, as well as the fact that Kosala and Videha do not appear in the earlier Vedic literature, but are mentioned for the first time in the Satapatha Brāhmaya, and the contemptuous references in the Atharvaveda and the Sūtras indicate that Magadha and Vanga were then outside the pale of Aryan culture. All these leave no doubt about the general correctness of the assumption that the Aryans had not advanced beyond the middle region of Northern India till after the end of the age represented by the Vedic Samhitäs, i.e. at a time when most, if not all, the traditional royal dynasties dealt with in this chatter had ceased to exist.

It is worthy of note that even the Smriti texts quote verses dening Aryāvarta or the land of the Aryas as co-extensive with
Northern India. As to the expansion of the Aryan culture to the
Deccan and South India, the evidence of Pāṇnii's Ashādhyāyi and
Kātyāyana's Vārtikas on Pāṇini, seems to be fairly conclusive. The
only country in the Deccan south of the Narmadā mentioned by
Pāṇini is Aśmaka, whereas Kātyāyana knows Pŋādya, Chola, and
Kerala. This shows that the Aryans came into contact with these
South Indian peoples during the time intervening between Pāṇini
and Kātyāyana, i.e. some time between the sixth and fourth centuries B.C.⁶'s Yet the Purāṇas and the Rāmāyana would have us
believe that the whole of South India, including Ceylon, was colonized by the Aryans or brought under their sphere of influence by the
time of Rāmachandra in the Tretā Age!

It is impossible to rely upon the traditional account as recorded in the Epics and Puranic texts, at least in respect of those particulars which are so flatly contradicted by the evidence of earlier texts—an evidence which is all the more valuable as it is based upon incidental notices not likely to be fabricated in order to serve any preconceived notion. Whatever we might think therefore of the kings and dynasties mentioned in the traditional account, we can hardly accept, without demur, the location of their principalities as described in the Epics and the Purāṇas.

It might be argued that many of the royal dynasties mentioned in the traditional account were not Aryans. This is not unlikely, for evidence is gradually accumulating (cf. Ch. VIII, IX) that a fairly developed culture and powerful kingdoms flourished in India before the Aryans. But such a theory goes definitely against the traditional account which represents all ruling families, described above, as descended from the common ancestor Manu ⁷⁰

At the same time the existence of non-Aryans may be easily inferred. For besides the descendants of Manu who established dynasties all over India, traditional history mentions Rākshasas, Vānaras, Asuras, Daityas, Dānavas, Nāgas, Nishādas, Dasyus, Dāsas. Pulindas, Sakas, Yavanas, Kambojas, Pāradas, Pahlavas, etc. who

appear to have been outside the Arvan fold. The Rakshasas were aborigines who were hostile to the Brahmanas, while Vanaras, another aboriginal tribe, were allied to the Brahmanas. Asuras, Daitvas, Dānavas, and Nāgas denoted peoples of different cultures in various stages of civilization ranging from the rude, aboriginal, uncivilized tribes to the semi-civilized races, offering strong resistance to the spread of Aryan culture. There appear to have been three stages in the description of the hostile tribes of Asuras, Danavas, Daityas, and Rākshasas in Puranic accounts. Originally, these denoted human beings, but as they were generally the enemies of the Aryans. these names came to mean alien and hated, hostile or savage men. Later on, these names became terms of opprobrium and abuse which led to the attribution of evil character to these peoples. Even certain Arvan kings were termed Danavas or Asuras due to their evil character. Finally, these terms came to be associated with demoniac beings and were used synonymously with demons The Nagas appear to be partially civilized people. The Nishadas, Dasas, Dasyus, Pulindas, and Kirātas were mostly aboriginal, rude, savage tribes in a very primitive stage of civilization All these tribes lived in hilly tracts, and some of them were cannibals. The Nishādas, also known as Mlechchhas, were according to ancient traditional views a mixed race of Arvan origin born from a Brahmana male and a Sudra female.71 They are associated with the hills of Central India and the Vindhyan tracts. They had also settlements in the Vatsabhūmi and, further east, near Allāhābād The Pulindas, Śabaras, Mūtibas, etc were the aboriginal tribes of the south. The Pulindas were connected with the north also. The Kirātas had settlements in Assam and Nepāl. The Sakas, Yavanas, Kambojas, Pāradas, Pahlavas, etc. were foreign tribes from the west, but they were evidently absorbed among the Kshatriyas. Pāndya. Chola, and Kerala dynasties in the south claimed descent from the Lunar Turvasus.

But whatever we might think of the geographical and ethnical background of the traditional account, it perhaps reflects more accurately the method and process of Aryan colonization in India. One distinguishing feature of the Aryan expansion, as described in it, deserves special mention. The Aryans extended their sway and colonized fresh lands not by conquest alone with the aid of big armies. The colonization was also effected by small bands of adventurous Brahmanas and Kshatriyas from different Aryan kingdoms, who went to new countries and, after clearing the jungles and making the tracts habitable, set up hermitages and residences there. The territories surrounding the Aryan-occupied Mashyadesa, the Vindhyas and Vidarbha, were colonized in this fashion. The Aryans colonized under the leadership of Kshatriya tribes, and new settlements were named after these tribes. The speed of Aryan ex-

pansion was necessarily slow where they received opposition from the aborigines or semi-Aryans or non-Aryans, as in the case of their eastward progress.

Rāma of Ayodhyā is made to play a very important part in the expansion of Aryan culture in the south. It was probably on account of the signal service attributed to him in colonizing the Deccan, and spreading the Aryan religion far in the south and rendering it free from the harassment of aggressive and semi-barbarous tribes, that he has been included among the incarnations of the god Vishnu. This expansion of Aryan culture in the south was the result of the hearty co-operation of the Brahmana and the Kshatriya in carrying the banner of Aryanization. The Brahmana missionaries who accompanied the Kshatriya conquerors, introduced the essentials of Arvan culture and tradition to the masses, converted the principal figures, and paved the way for social and cultural contact by allowing high-born Aryans to marry with non-Aryans. Agastya, the pioneer among the Rishis to erect a hermitage in the trans-Vindhyan regions, preceded Rama by generations; but he paved the way for later adventurers. The story of Agastya reveals the important part played by the Brahmanas in the spread of Aryan civilization over southern India The ancient Rishis undertook missionary enterprise and helped in the propagation and diffusion of the Arvan culture by their active efforts, often at considerable risk to their lives. They moved in large numbers to distant lands. and performed sacrifices and observed religious rites in their new settlements. Their genuine missionary spirit, coupled with their peaceful character, not using any force nor resorting to retaliation despite provocation, helped in creating a favourable atmosphere for the reception of the Arvan religion. The Rishis mixed with the aborigines and civilized them. The Aryan spirit was kept alive by the Brahmana, not by the Kshatriya; but, "without the protection of the chief, the Brahmana was powerless; and it was not the Brahmana's peaceful penetration, but the military exploits of the chief that enthralled the popular imagination "72 Rāma's expedition, as described in the Rāmāyana, did not put the non-Aryans of the south under the political subjugation of the Aryans, but it brought the southern territories of the Vanaras and Rakshasas as protectorates under the sphere of Arvan influence,73 and was mainly responsible for bringing these peoples under Arvan influence.

The contribution of the Yādavas in carrying the banner of Aryan culture over large tracts of land in the south-west and in Rājputāna, Gujarāt, Mālwā, and the Deccan, which came under their occupation, needs special mention. It was due to the activities of the Yādavas that these regions were brought under the Aryan way of life. The peculiar feature in the career of the Yādavas is the considerable mixture they had with the non-Aryans, though they

trace their descent from Purūravas through Yadu. This fact coupled with the possible looseness in the observance of the Aryan Dharma led the Epics and Puranas to call the Yadava branches Asuras, and to class them with the tribes of the extreme north-west and west among the Nichvas and Apachyas. The fact that they mixed freely with the Non-Arvans, with whom they had marital relations and some of whose customs they incorporated, facilitated the Aryanization of the so-called outsiders, and thus spread Aryan culture far and wide. Krishna of the Yadavas, well known as a politician, warrior, and religious teacher, was a national hero, who was regarded as an incarnation of Vishnu. He held liberal and catholic views and his doctrines helped in the spread of Aryan ideas among the so-called Sūdras.

Whatever we might think of the historicity of Rama and Krishna. as depicted in the above accounts, they may not unreasonably be regarded as true types of Arvan heroes who were pioneers in the spread of Aryan culture and colonization all over India

GENERAL REFERENCES

KIRFEL. W.: Das Purāna Pañcalaksana. Bonn, 1927 PARGITER, F E: Ancient Indian Historical Tradition London, 1922 RANGACHARYA, V · Pre-Musalman India, vol II "Vedic India," Part I Madras,

1 AIHT, pp 30, 54
1a Some, however, do not attach any historical value to the story of the Ramayana cf. e.g. Ch VIII, above, p 168 .

cf. e.g. Ch VIII, above, p 168.

15. El, VI, p. 11, 12

2. JRAS, 1911, pp. 479 fl. 675 fl

3. Bridar-Senhidz, XIII 3: Répaterengini I. 48-56

4. Bai, PHC, IV 9 LIS (3146 B.C.); Trivesta BJORI, XXV pp. 116-38 (3069 B.C.); Vaidya, PHC, IV 9 LIS (3146 B.C.); Trivesta BJORI, XXV pp. 116-38 (3069 B.C.); Chen Cupta, JRASB(Cl.) III 101 ff; IV, 333 f. (2448 B.C.); Karandikar, POC XII. Summaries Part II, pp. 6-8 (1931 B.C.); Deb, JASB, XXII. pp. 211-30 (1460 B.C.); Daftary, PCC, XII. Summaries Part II, pp. 8-12 (1197 B.C.), Prodhan, CAI, pp. 262-9 (1151 B.C.); Deb, JASB, XXII. pp. 211-30 (1460 B.C.); Daftary, PCC, XII. Summaries Part II, pp. 8-12 (1197 B.C.), Prodhan, CAI, pp. 262-9 (1151 B.C.); B.C.); S. AHTI, pp. 119-85, JKA, pp. 13-22; 67-9; S. 74.

7. Vépa P. 21, 22; 8 160-7; 57, 39-41, 58

8. Mbb, XII. 59 106-8.

8. Mbb, XII. 59 106-8, SBE, XII. pp. 216-8, Mbb (Cl. Ed.) III 185, Matega, P., Sat, Br. 18 1, 1-6, cf. SBE, XII. pp. 216-8, Mbb (Cl. Ed.) III 185, Matega, P.,

Sat. Br I 8 1 1-6, cf SBE, XII. pp. 216-8, Mbh (C: Ed) III 185, Matsya, P,
 1. 11-34; 2 1-19; Bhāgavata P., VIII. 24 ff, IX. 1 ff.

1. 11-34; 2. 1-16; Bhögusette P., VIII. 24 T., IX. 1 T.

10. AIRT, De Me, D. 28-36, Majumdar, CAG, D., 507-3; Dey, GD, D. 17

11. The Authority of the Company of the Compa

Srivasti has been identified with modern Sahet Mahet on the Rap!: in the district of Gonda in Outh (Dey, GD, p. 189). Cf. also Majumdar, CAG, p. 469.
 Tribes is Ancient India, p. 121.
 Pedma P., VL 189. 72; 223. 51-70; Brahma P., 196. 16-197
 Yishnu P., V. 23. 28-24. 5, Harl, H. 57; 43-63.
 Mith, XII. 339. 84, 103-4; cf. Sukthankar, ABORI, XVIII p. 48
 Mith, XII. 389. 84, 103-4; cf. Sukthankar, ABORI, XVIII p. 48
 In the Nieck Kaf (Maright) Dally of Bombay) in the year 1932-3.
 Metrys P. 45. 48-6; Velyar P., 94.51-2; Kirel, PPL, p. 429. 30.

- 23. Chedi comprised the land between the Chambal and the Ken on the southern bank of the Jumna corresponding to modern Bundelkhand. Cf. Dey, GD, p. 48;

- bank of the Jumna corresponding to modern Bundelkhand. Cr. Dey, GD, p. 48; Majumdar, CAG, p. 728.

 25. Erich, FP, pp. 35r-23.

 26. Erich, FP, pp. 35r-23.

 27. Erich, FP, pp. 37r-23.

 28. Interest of the State of the State of Shahabad in Blanc Dey, GD, p. 170.

 28. Vayu. P., 88. 146-13. Brohma F. 8. 52-71.

 28. AllHT, p. 288.

 29. The name Bhagirath is applied to the stream which originates from Gangotri and Gomukha, and joining Bhliangana at Tehri meets Alakanandá, the main atream of the Ganges, at Develproykes, Jayeckandin, BH, p. 159.
- For the Nala epiaced, et Mob (Cr. Ed.), III. 30-78.
 For the Nala epiaced, et Mob (Cr. Ed.), III. 30-78.
 Mob (Cr. Ed.), I. 166-73 gives another account.
 Zeadanya (Potana in Mob, Cr. Ed.), I. 168 25) is the Potana or Potali of the Jatakes (Raychaudhuri, PHAI, p. 121). It has been identified with Paithan or Pratishiphian on the north bank, of the Goddwart, 28 miles to the south of Aurangabad-Dey, GD, pp. 157, 159.
- 33. For the account of Rama we have mainly relied on the Ramayana,
- 34. Ancient settlements of Takshaśilä are found near the Bhir mound near Shāhdheri which lies 20 miles north-west of Rawalpindi (Marshall-Guide to Taxila). Pushkarāvatī may be identified with Chārsadda near the confluence of the Kubhā and Suvāstu, 17 miles north-west of Peshāwar.
- 35 North Pañchala, called Ahnchcharta, comprised the modern Rohilkhand district in the U P, and had its capital at Ahichcharta identified with modern Ramnagar (Dey, GD, p 2). South Pañchala, which incorporated the old kingdom of Kanyakubja, consisted of the districts of Agra and Cawnpore with its capitals. at Makandi and Kampilya (modern Kampil, 28 miles east of Fatehgarh-Dey, GD, p. 88).
- 36 The problem of the Daśarajña (battle of ten kings) has been discussed in section II of this chapter.

- Mibh. (Cr. Ed.) 1, 189 51-43.
 AllH. pp. 76, 281
 AllH. pp. 76, 282
 AllH. pp. 76, 282
 AllH. pp. 713, fn 9.
 AllH. pp. 713, fn 9.
 AllH. pp. 713, fn 9.
 AllH. pp. 714
 AllH. pp. 715, Brahmanda P, 111
 Bo 20-28, also Mbh, XII. 150-52, cf Arthádástra, Mysore, 1919, p. II
 Mbh (Cr. Ed.) 1, 105, 7-22
- The life of Krishna has been reconstructed on the basis of the old and authentic Puranas, the Harwamia and the Mahabharata—See Munshi, Glory that was Guryaradesa, I. pp 120-24.
- 43 Cf. Munshi, Glory that was Gurjaradesa, I, pp 111-27.
- 44 The account of the Kauravas and the Pandavas has been based on the Mahabharata. In spite of epic embellishments, the keinel of the story may be regarded as historical
- as instorcial.

 Similarly some Purānas begin the "futurc" about a century after the Bhāiata War. (Pargiter, AHT., pp 51-4)

 4 AHT., pp. 283-4

 47. JRAS, 1914, p. 1027

 48. JRAS, 1915, p. 889.

 49. Ved Ind II. p. 187.

 50. Gogathe Pathimana, 1 2 10 ff; Ved Ind, II p 133

- 51. Mbh (Cr. Ed), I. 89 31-43

 - 52. AIHT, p. 120. 53. AIHT, p 281.
- 53. AIHT, p. 281.
 54. CAI, pp. 83-08
 55. BY, II. pp. 12-78
 55. BY, II. pp. 12-78
 56. Nivuken, II. 24, 25, Mbh, XII. 60. 39, Menu, VII. 41; Fargiter, AIHT, p. 120
 57. Churye, PCC, XX, PBS0, Sp. 120, XX, II. 5, 4, 1-4
 57. Churye, PCC, XX, PBS0, Sp. 120, XX, II. 5, 4, 1-4
 58. M6b, XXI. 150, 2, PHAI, p. 12. Dr., XI. 5, 5, 13, XIII. 5, 4, 1-4
 59. M6b, XXI. 150, 2, PHAI, p. 12. Dr., XIII. 5, 4, 1-4
 60. Herr, III. 2, 5-4, 22-6; 5, 11-7.
 61. Cf. BY, II. pp. 72-6, 5, 11-7.
 62. Sat. Br, XXII. 5, 4, 1 ft.
 63. Mbh, XXI. 150, 3, 6-16.
 64. Herr, II. 30, 6-16.
 65. Herr, II. 30, 6-16.
 67. AV, XXX. 127, 7-10.

- 68. Brih Up, III. 3.

 68. AlHT, p. v.

 68. AlHT, p. v.

 68. CD R. Bhandarkar—Carmichael Lecturer, 1918, pp. 6-7.

 68. Cf D. R. Bhandarkar—Carmichael Lecturer, 1918, pp. 6-7.

 68. Cf D. R. Dandarkar—Carmichael Lecturer, 1918, pp. 6-7.

 68. Cf D. R. Dandarkar—Carmichael Lecturer, 1918, pp. 6-7.

 68. Cf D. R. Bhandarkar—Carmichael Lecturer, 1918, pp. 6-7.

 68. Sandyumna stock, the Munda race and its branch the Mon-Khmer folk in the cast, and the Mānva stock (i. et. her emanning descendants of Mann). the Dravicians (AlHT, p. 295). Traditional history associates the Allas or the Lunar dynasty with the Himlalyare, Pargiter, therefore, interprets the traditional accounts as stating that the Aryans came into India from the Himlalyan regions (bidd, pp. 297 fl.). But the term Aryan is not confined to the Allas alone; it comprises all the no-called stocks enumerated by Pargiter, There is absolutely no distributation between the Solar and the Lunar dynastics as regards status or dignity.
- or cignics.
 7 Mans, X.
 7 Kennedy, RAS, 1915, p. 516.
 7 Kennedy, RAS, 1915, p. 516.
 7 Ly Viswanatha, International Law in Ancient India, pp. 25, 45; Racial synthesis in Hindu Culture, p. 9.

CHAPTER XV

FROM THE ACCESSION OF PARIKSHIT TO THE END OF THE BARHADRATHA DYNASTY

The Puranas have preserved a list of the kingdoms that flourished at the end of the Bharata War and continued till they were all absorbed by the great Nanda empire of Magadha in the fourth century B.C. In addition to the kingdom of Magadha, ruled at first by the Barhadrathas, and then by other dynasties, the Puranic list refers to the Pauravas, Aikshvākus, Panchālas, Kāsis, Haihavas, Kalingas, Aśmakas, Maithilas, Śurasenas and Vitihotras. The area embracing these states comprised the eastern part of North India. the middle country, and some parts towards its west; but the countries further west and north-west have not been referred to. Of the various dynasties mentioned, the Puranas deal in some detail only with the Pauravas, Aikshväkus and the dynasties of Magadha, but give merely the number of kings in the case of other contemporary dynasties. The detailed history of the period recorded in the Puranas is thus confined more or less to the region now represented by the United Provinces and South Bihar.1

1. THE PAURAVAS

The first Paurava king after the Bhārata War was Parīkshit, son of Abhimanyu, and grandson of Arjuna. Parīkshit was well-versed in the science of duties of kings and was endowed with noble qualities. The story of the conquests of Parīkshit or of the prosperity of the Kuru kingdom during his reign, recorded respectively in the Purāṇas and Atharvaveda, seems to relate to an earlier king of that name.

The Kuru kingdom over which Parikshit ruled extended from the Sarasvati to the Gangā according to epic tradition. It corresponded to modern Thänesvar, Delhi, and the upper Gangetic Doāb.² The Kaliyuga era is said to have started in the reign of Parikshit after the death of Krishna, and Parikshit is reported to have chased away the Kali out of his kingdom, which merely indicates his excellent and benign rule. It is said that one day when lost in a forest, while hunting. Parikshit met a sage and asked him the way. The sage was observing a vow of silence and did not reply. Being angry Parikshit placed a dead snake round the sage's neck and went away. The sage's son cursed Parikshit, and foretold that within a week the king would be bitten to death by Takshaka, king of the snakes. Despite the king's elaborate precautions, the curse had its effect and Parikshit died of snake bite on the appointed day.

This mythical story seems to suggest a genuine historical fact. The rise of the Nagas in Gandhara has already been referred to. It appears that taking advantage of the weakened condition of the Pauravas as the result of the Bhārata War, Takshaka, king of the Nagas, marched against Hastināpura and king Parikshit evidently died in his attempt to check their attacks.

Parikshit's son Janameiava was a minor when he was installed king. To avenge his father's death Janamejaya invaded Takshasilä and slaughtered countless Nagas. It was only through the intercession of Astika that Janameiava stopped this slaughter. Takshaka appears to have escaped safely. The conquest of Taxila in the extreme north-west indicates that the intervening Madra or Central Puniab also was under the control of Janameiava. The slaughter of innumerable Nagas has been mythologized into the Sarpasatra (snake-sacrifice) of Janamejaya where serpents fell as oblations into the sacred fire through the spell of the Mantras.3 Janamejaya was a powerful and strong monarch and he re-established the Kuru dominion. After conquering Taxila and uprooting the Nägas, Janamejaya appears to have made Taxıla his headquarters for some time. The story of the Mahābhārata was recited to Janamejaya at Taxilā by Vaisampāyana.4 Asvapatı of Kekaya was a contemporary of Parikshit and Janamejaya. When Janamejaya subjugated Gandhara, Aśvapati Kekaya, whose territory lay to the east of Gändhära, probably accepted Janamejaya's suzerainty. Aśvapati was famous for his good government and philosophical knowledge. It is not definitely known whether Asvapatı was a title or a personal name, but it seems to be more likely that it was the title of the rulers of Kekaya.

Kakshasena, a brother of Janamejaya, seems to have established a separate kıngdom. From the references in the Pańchavimsa Brāhmaṇa which states that Dṛiti, apparently priest of king Abhipratārin, son of Kakshasena, performed a sacniāce in Khāndava, in which lay Indra-prastha- it appears that the junior branch resided at Indraprastha. A further reference to the "Abhipratāriṇas" (i.e. descendants of Abhipratārin) in the same text as "the mightiest of all their relations" a suggests that the junior branch excelled the other branches of the Kurus. The Kuru kings at Indraprastha continued to rule there long after the destruction of Hastināpura and the migration of the senior branch to Kaušāmbī. T

Janamejaya was succeeded by his son satāmīka, who married a princess from Videha. To Satāmīka was born Advamedhadatta who was succeeded by his son Adhistmakrishna. None of these descendants have been definitely referred to in the Vedic texts and the exact relationship of some Kurus mentioned in the Vedic texts is not clear. It appears that satāmīka was the contemporary of Ugrasona Janaka of Videha, and Asyamedhadatta of Pravāhasa Jaivāli

of the Pañchâlas, both of whom were philosopher kings.⁸ In the reign of Adhisimakrıshna, when Diväkara was ruling in Ayodhya and Senājit in Magadha, the Purāṇas are said to have been recited for the first time in the twelve-year sacrifice in the Naimishāranya forest on the river Gomati in Ayodhyā. Saunaka officiated as the head sacrificer and to him were recited the Mahābhārata and the Purāṇas as handed down by the Sūtas.⁹ Thus there seems to have been a collection and edition of the traditional accounts for the first time, on the occasion of the Naimsha sacrifice. The lists of dynasies and kings that subsequently ruled were recorded in the future tense as if they were prophecies. The Matsya and Vāyu begin their "future kings" after the time of Adhismakṛṣhan.

During the reign of Nichakshu, the son and successor of Adhisimakrishna, the Kuru kingdom appears to have passed through severe calamities. The capital Hastinapura was washed away by the Ganges. 10 The devastation of crops in the Kuru country by locusts (or hail-storms), mentioned in the Chhandogua Upanishad. 11 is also possibly to be referred to this period. The famine brought on by locusts was probably followed by heavy downpour flooding the country. Consequently not only Hastinapura but the whole of the northern Doab was seriously affected. The Kuru people evacuated and migrated in a body over 300 miles down stream and settled in Vatsabhūmi, with Kauśāmbī, (modern Kosam on the Yamunā near Allāhābād) as their capital. This wholesale migration, according to Pargiter, was due to the pressure from the Punjab. 12 But the explanation given in traditional accounts, coupled with the locust menace, satisfactorily accounts for the migration The Vatsas, it may be recalled, were under the Paurava king of Kāśi,13 and sided with the Pandavas in the Bharata War.

The history of the Paurava kings of Kauśāmbī is obscure. The Purānas give only a list of twenty-three kings after Nichakshu, up to Kshemaka, the last in the line Among them Satānika and his son Udayana are interesting and important figures. Satānika, also styled Parantapa, is said to have attacked Champā, the capital of Anga, during the reign of Dadhivāhana. Udayana succeeded his father on the Vatsa throne. According to Buddhist accounts, Udayana was born on the same day as the Buddha. Whether we accept it or not, there are good grounds to believe that Udayana was contemporaneous with the Buddha and also with Pradyota Mahāsena of Avanti and Ajātaśatru of Magadha. His history will, therefore, be more appropriately dealt with in the next volume.

2. THE KOSALAS

The Puranas give a list of 31 Ikshvaku kings of Kosala beginning with Brihadbala who was killed in the Bharata War. His sixth descendant Divakara was a contemporary of the Paurava king

Adhisimarkṛishna. This Puranic list serves as a typical instance of the confusion brought about by jumbling together different historical traditions at a late date. For this genealogical list of the Ikshvāku kings of Kosala includes the names of Śākya, Śuddhodana, his son Suddhārtha and the latter's son Rāhula, immediately before Prasenjit, who is known from Buddhist sources as the son of Mahākosala and a contemporary of the Buddha. Without, therefore, relying much on this inaccurate and incomplete list we may glean a few interesting facts about Kosala from the Buddhist literature.

It appears from the Buddhist account that the Kosala kings had their capitals at Sāketa and Srāvasti in addition to Ayodhyā. Ayodhyā was probably the earliest capital followed by Sāketa, and Śrāvasti was the last. Ayodhyā was a town on the river Sarayū. Sāketa is often taken to be identical with Ayodhyā, but the separate mention of both as existing in Buddha's time suggests that they were possibly adjoining cities like London and Westminster. Frāvasti (in Pāli Sāvatthi) has been identified with Sāhet-Māhet, on the south bank of the Rāpti on the borders of the Gonda and Bahraich districts of the United Provinces. In Buddha's time, Ayodhyā had sunk into comparative insignificance but the other two figured among the six great cities of India. The Buddhist works mention some kings of Kosala whose names are not found in the dynastic lists. 16

We learn from the Buddhist accounts that there were frequent wars between the neighbourng kingdoms of Kosala and Kāśa and there was continued rwalry for supremacy between them. It appears, however, that sometimes friendly relations prevailed between Kāśi and Kosala and there were matrimonial alliances, and probably the countries at times were under a common ruler who came at the head either by conquest or by inheritance 17. The Vedic texts indicate the close association of these two states by the phrase Kāśi-Kosala. In their struggle for supremacy sometimes Kāśi and sometimes Kosala emerged victorious. Though the Kāśis appear to have succeeded in the beginning, the final victory went to the Kosalas. The results of these contests, as recorded in the Buddhist literature, can be grouped in four successive stages as has been suggested by Dr. Law, 18.

The canonical legend in which Brahmadatta, the powerful king of Kāši, in his campaigns of conquests, defeated the weak Kosalan king Dighiti, marks the first stage in the Kāši-Kosala struggle. Brahmadatta then ordered the execution of Dighiti and his queen who were captured in the Kāši realm living in disguise. Then the Kosala prince Dighāyu gained confidence of king Brahmadatta, was raised to the position of a general, and was reinstated on the Kosalan throne on account of his generosity in not killing Brahmadatta in revenge. In the second stage, illustrated in the Rājovāda Jātaka,

both K&éi and Kosala appear as equally powerful realms flourishing side by side, respectively under Brahmadatta and Mallika. The K&ii ruler followed the religious principle of conquest of wrath by kindness, whereas the Kosala king adhered to the strong administrative principle of treating hard with hardness and soft with softness. The Mahāsīlava Jātaka brings out the third stage, in which the Kosala king took advantage of the good nature and religious tendencies of the Kåši king and invaded the neighbouring kingdom.

The final stage marks the total absorption of the Kāśi kingdom under the Kosala king Mahākosala, who has been mentioned as the sovereign of both Kāśi and Kosala. From the fact that the Buddhist records do not refer to contests between Kosala and any other tribe or state, it would appear that the gradual absorption of the clans and tribes in the northern part of Kosala was effected without any important battle, campaign, or siege. 19 The contact of Kosala with Kāśi, however, as we have seen, resulted in a struggle lasting for generations with varying fortunes till Kası was completely subjugated by the Kosala king Kansa, who appears to have been a predecessor of Mahākosala or the great Kosala. Mahākosala was the father and immediate predecessor of Prasenajit (in Pāli Pasenadi). Dr. Raychaudhuri is inclined to identify Hiranyanabha mentioned in later Vedic texts with Mahākosala 20 Mahākosala gave his daughter Kosaladevî in marriage to the Magadhan king Bımbisara. The fateful sequel of this marriage will be described in the next volume.

3. MAGADHA

We have already seen in the last chapter that the Barhadratha dynasty ruled in Magadha at the time of the Bharata War, and that Jarasandha, the first great emperor of Magadha before that war, was succeeded by his son Sahadeva, who became an ally of the Pandayas, and was killed in the war. After Sahadeva, his son Somādhi became king at Girivraia, at the foot of which Rajagriha, the ancient capital of Magadha, grew up. The old site of Rajagriha corresponds to modern Raigir in the Patna district. Senajit, the sixth successor of Somadhi, was a contemporary of the Paurava Adhisīmakrishņa and Kosala Divākara. Ripunjaya, the twenty-first in descent from Somadhi, is stated to have been the last king of the Bārhadratha dynasty. Ripuñjaya is said to have been killed by his minister Pulika (variants: Su'- Mu'- or Punika, Pulaka) who then installed his son Pradyota on the throne. The Pradyota dynasty, according to the Puranas, lasted for five generations covering a period of 138 years, and was supplanted by Sisunaga who, after placing his son to rule over Kāśi, fixed his capital at Girivraja (or Rājagriha).21 Bimbisāra and Ajātasatru appear in the Puranic lists as fifth and sixth in descent from Sisunaga, who founded a new royal dynasty, called the Saisunaga.

But the Purānas have distorted history, and most of the above statements regarding the events following the death of Purañjaya are contradicted not only by the testimony of other Sanskrit sources and Buddhist accounts, but by the Purānas themselves. Here, as in the case of Kosala, genuine historical facts have been wrongly jumbled together, and it appears that the independent lists of the dynasties of Pradyota, Sisunāga and Bimbisāra have been placed in a false sequence and supplied with imaginary connecting links.

That the Pradyotas ruled at Avanti would be evident from the statement in the Matsya Purāṇa itself, 22 and we have no reliable evidence that there was any Pradyota dynasty of Magadha. The first Pradyota was a contemporary of Bimbisāra of Magadha according to Pāli accounts, and a co-ordination of the Purāṇas with other Sanskrit literature also supports the same conclusion; but the Purāṇas separate Pradyota and Bimbisāra by about ten generations If siśunāga destroyed the fame of the Pradyotas, he must come about four or five generations after Chaṇda Pradyota, the first king of the Pradyota dynasty. Siśunāga has been placed as the progenitor of the Bimbisāra family by the Purāṇas, whereas the Pāli accounts rightly place him four or five generations after Pradyota (and hence also Bimbisāra, his contemporary) and make him the founder of a dynasty that succeeded the dynasty of Bimbisāra

The Puranas themselves in a way indicate the posteriority of Sisunaga to Bimbisara as they include Varanasī in Sisunaga's dominions.²³ because Bimbisara and Ajatasatru were the first to establish Magadha domination in Kāśī. The hostility between Avanti and Magadha, again, is to be met with for the first time in Ajātaśatru's reign. There is no trace of it during the period of Bimbisara, and hence Sisunaga who supplanted the Pradyotas must come after Bimbisāra and Ajātasatru. The probable reason for placing Sisunāga before the Bimbisara-Ajatasatru group appears to be that Sisunaga had his capital at Rājagriha, and as Udāyin was credited in the Puranic accounts with the removal of the capital to Pātaliputra,24 it was thought by the ill-informed Puranic chroniclers of a late date that Sisunaga came before Udayin But the statement in the Mālālankāravatthu that Rājagriha lost its rank as a royal city from the time of Sisunaga indicates that Sisunaga flourished after the palmy days of Rālagriha, i.e. the period of Bimbisāra and Ajātaśatru. Sisunaga probably chose the old capital Rajagriha as his headquarters in order to meet the attacks from Avanti on that part of Magadha.

We may thus hold that the Bärhadratha dynasty in Magadha ended with Ripuñjaya who was probably killed by his minister, and was succeeded by Bimbisāra. The history of this famous king who laid the foundations of the greatness of Magadha will be related in the next volume.

TRADITIONAL HISTORY FROM THE ACCESSION OF PARIKSHIT

4. OTHER KINGDOMS

In addition to the three important kingdoms of Magadha, Kosala, and Vatsa, mentioned above, several others flourished during the period following the great Bhārata War. But their history is little known, and we have to rest content with a few casual notices, gleaned from different sources. Beginning from the west we have the Pañchāla kingdom, the total number of whose rulers from the Bhārata War up to Mahāpadma Nanda is given as twenty-seven in the Purāpas though no names are mentioned.

Parichakrā, Kāmpilya (or Kāmpila) and Ahichchhatra are the important cities in Pañchāla that have been mentioned in the Vedic and Puranic texts. Reference has already been made to the first two cities Ahichchhatra has been identified with a ruined site of the same name near modern Rāmnagar in the Bareilly district The city was still considerable in extent when visited by the Chinese pilgrim Hiuen Tsang in the seventh century.

Reference has already been made to the division of the Pañchāla into north and south during the reign of king Drupada. A Jātaka story seems to suggest that a Chedi prince went to the north and formed the Uttara Pañchāla kingdom with colonists from the Pañchāla and Chedi countries. The Attareya Brāhmana (VIII. 23) represents Durmukha as a universal monarch who made extensive conquests in every direction and was anointed by Brihaduktha.

Probably the Durmukha (Dummukha) of the Brahmanical and Buddhist accounts is identical with Durmukha of Pañchāla, who, according to Jain tradition, was a Pratyeka-Buddha. Some accounts associate the name of Brahmadatta, legendary king, with Pañchāla.

We have next the kingdom of Sūrasena with its capital at Mathira on the Yamunā. Sūrasena (modern Muttra district including some of the territory still further south) before the period of the Bhārata War was under the occupation of the scions of the Yadu family. The Purānas mention twenty-three Sūrasenas after the Bhārata War up to the period of Nanda, but no dynastic lists are available.

To the south of Sūrasena lay Avanti Avanti roughly corresponds to central Mālwā, Nımār and the adjoining parts of the Central Provinces ²⁸. The capital of the state was also known as Avanti or Ujjayini, identified with modern Ujjain on the Siprā, a tributary of the Chambal. Ujjayini was a very important city in ancient India both politically and commercially, and it is rather strange that the rulers of so famous a city have not been directly mentioned in the Puranic accounts. It is probable, however, that the twenty-eight (according to some Purāṇas twenty-four) Haihayas (the descendants of Yadu) who are said to have ruled after the Bhārata War were

really the rulers of Avanti. For it may be recalled that the Avantis were one of the five branches of the Haihayas.²⁷ According to some scholars the twenty Vitihotras who are mentioned in the Purāṇas as having ruled after the Bhārata War, were kings of Avanti.^{27s} But no definite information is available regarding the history of Avanti after Vinda and Anuvinda, who flourished at the time of the Bhārata War. When we next hear of Avanti, more than five centuries later, it was under the Pradyotas, as has been related above.

Special importance attaches to the kingdom of Videha as it was a great centre of culture and learning. The Videha dynasty, or the race of the Janakas according to Puranic accounts, ended with Kṛiti, who has been identified with Kṛitakshana, son of Bahullásva, the ruler at the time of the Bharata War. ²⁸ But as we find mention of Janakas of Videha even after the period of Yudhishthira, the identification of the last of the Janakas does not seem to be correct as is rightly pointed out by Raychaudhuri ²⁹ Kṛiti may reasonably be identified with Karāla (Janaka) the Vaideha, mentioned in the Arthaśāstra, who is said to have perished along with his kingdom and relatives on account of his violation of a Brāhmaṇa maiden ³⁰ This story is confirmed in the Buddhist accounts, which make Kalāra the last of the line

The great king Janaka of Videha, and the sage Yājñavalkya, from whom he learnt Brahmaviduä (spiritual knowledge), are famous names in Indian history, but their chronology is uncertain and there might have been more than one pair bearing these names. It appears from the Mahābhārata that one Janaka was ruling over Videha at the time of Janameiava, son of Parikshit, and Svetaketu, son of Uddālaka, a prominent figure in Janaka's court, attended Janameiava's snake sacrifice.31 The philosopher king Janaka of the Upanishads was a contemporary of Yājñavalkva and Aśvapati, king of the Kekayas, but unfortunately both Yājñayalkya and Aśyapati are also family names, just like Janaka, so that no chronological deductions can be drawn from this synchronism. Dr Raychaudhuri places the Vedic Janaka, whom he takes to be the father of Sītā, after the date of Janamejaya Pārīkshita, the descendant of the Pāndayas 22 This identification goes against many well-established synchronism in traditional history and fails to account for the period of Rama and the subsequent Ikshväkus in the scheme of history.

There is, however, no doubt that one pair of Janaka, the philosopher king, and Yājāavalkya flourished after the period of the Bhārata War, as Satānika, the successor of Janamejaya, is said to be the disciple of this Yājāavalkya who was himself a disciple of Vaisampāyana. Ugrasena may probably be the personal name of Vaisampāyana. Ugrasena med poes not occur in dynastic lists. 33 It may be noted that the fame of the Janakas of Videha, both before

TRADITIONAL HISTORY FROM THE ACCESSION OF PARIKSHIT

and after the Bhārata War, rests more on their patronage of learning, culture, philosophy, and spiritual attainments than on their martial exploits or sacrifices. Kings of Videha usually maintained friendly relations with neighbouring states and formed matrimonial alliances with different contemporary ruling families.

The degeneracy in character of the last monarch, as already stated, brought the Videha dynasty to an end, and the overthrow of the monarchy was followed by the rise of a republic. This political revolution in Videha is one of the important events during this period. In Buddha's time the Videhas, along with the Lachchhavis of Vaisāli and other clans, formed a powerful confederation known as the Vajiis. The Kāši people apparently had a hand in the overthrow of the Videhan monarchy, as frequent struggles between Kāši and Videha have been referred to in an earlier period. Perhaps a junior branch of the royal family of Kāši established tiself in Videha. ²⁴ The Purānas mention twenty-eight Maithilas as having ruled after the Bhārata War. They were probably rulers of Videha

The traditional accounts contain no information about the kingdom of Kāšia fiter the Bhārata War beyond mentioning that there were twenty-four Kāšia kings down to the period of the Nandas. The Kāšis, being contiguous to the Kosalas and Videhas, naturally had some connections with these states. The later Vedic texts mention Kāši-Kosala and Kāši-Videha together, stating also that sometimes these had the same king and a common Purohita, which indicates the close contact that subsisted between these three states, Kāši, Kosala, and Videha.³⁶

The ill-feeling and rivalry between Käśi and Kosala which is indicated by Buddhist texts has already been referred to in connection with the Kosalas. The Assaka Jātaka testifies to the extension of the Kāśi suzerainty to Potali in the kingdom of Assaka in Southern India. Kāśi, the capital of the state, was the premier city in all India, extending over twelve leagues as compared to seven leagues which was the extent of Mithila and Indraprastha 36 On account of the importance of the city of Kāśi or Benares, it was the coveted prize of the neighbouring states. According to the Puranic account, during different periods in its history, Kāśi came under the sway of three successive suzerain powers of Northern Indiathe Pauravas of Vatsa, the Ikshvākus of Kosala and the kings of Magadha.37 In the interval between the decline of Vatsa and the rise of Kosala. Kāśi appears to have enjoyed independence under its famous king, Brahmadatta, who conquered Kosala, possibly about a century and a half before Buddha's time.

To the east of Magadha lay Anga. It has already been stated (p. 325) that Satānika, the father of Udayana of Kaušāmbī, attacked Champā, the capital of Dadhivāhana, king of Anga who, according to Puranic accounts, was the son of Anga. The Jain tradition re-

presents Dadhivāhana's daughter Chandanā or Chandrabālā as the first female to embrace Jainism shortly after Mahāvīra's death. In the confusion consequent on Satānīka's invasion of Champa, Chandana fell into the hands of a robber, but she is said to have maintained the vows of the order throughout. Anga seems to have been on terms of hostility all along with its neighbouring state of Magadha, and at one time included parts of Magadha, as would appear from the mention of Rajagriha as a city of Anga. The Anga suzerainty would also be evident from the defeat of king Bhattiya of Magadha by king Brahmadatta of Anga. But the Anga kingdom lost its independence when Bimbisara, son of Bhattiya, avenged his father's defeat and killed the Anga king Brahmadatta, annexed the capital Champa, and continued there as vicerov till he left for Raisgriha on his father's death.38 Bimbisara later converted Anga into a separate province and appointed his son Ajātaśatru (Kunika) as governor with headquarters at Champa.

The existence of several other kingdoms during this period is known to us, but we know hardly anything about them. The Puranas refer to thirty-two rulers of Kalinga, and twenty-five of the Aśmaka kingdom, but do not give any other details. There were also the kingdoms of Gandhara and Kamboja in the west, but they do not come into prominence until somewhat later. There were probably other kingdoms of which we do not even know the names

On the whole, the history of India, during the period of 400 or 800 years following the Bharata War, according as we place that event in 100 or 1400 B.C., is only known to us in vague outline. All that we can say definitely is that Northern India was divided into a large number of states and, so far as our knowledge goes, no paramount power arose within this long period which could effectively exercise its supremacy over all or even a large number of them. We can dimly discern the struggles for supremacy, and even the ideal of imperialism so strongly stressed in the Mahñbhārata was by no means absent, but we do not note any substantial progress towards the political unification of India.

^{1.} The omission of the states in the Punjah and the north-west is significant, and probably underste that these rates were serrously affected by the disorganization consequent on the Bhirata War. We find the wild tribe of the Nagas, who were probably inhabiting Gandhars, suddenly rising to power and taking possession of Takshabilla They also invaded the Paurava kingdom, which had become feeble, and reached up to Hastinapura where they killed the Pauvava kingdom. Parikshit.

^{2.} PHAI, p. 20.
3. The Sarpasatra mentioned in the Panchavimsa Brahmana at which one Jana-The Surpasatra mentioned in the Peńchavinias Brahmana at which one Jana-nejaya is said to have officiated as a priest is quite distinct from the Surpasarra matituted by king Janameraya, as it was for securing preservation and well-being of the serpents, whereas the cpic Surpasatra was for the desiruction of the serpents (Peńch, Br., XXV. 13 Ved. Ind., 1, 74). Raychaudhuri regards the spic account of the Surpasatra as having no historical basis, but accepts the the spic account of the Surpasatra as having no historical basis, but accepts the Brahmana pasages on which he relies for support (Ait. Br., VIII, 2); Set. Br.,

TRADITIONAL HISTORY FROM THE ACCESSION OF PARIKSHIT

- XIII. 5 4 1-3) relate to the universal conquests of Janamejaya, the predecessor of the Plandayas, and are stated in connection with his horse-sacrifice. Janamejaya, the descendant of the Plandayas, also started a horse-sacrifice, but it was not completed on account of some technical difficulties (Hon, III 2. 5-6, 25-28); 5, 11-17), and hence Janamejaya who is said to have performed horse-sacrifices may certainly be his ancestor.

 The property of the property

- 6 Pesich Br. II. 9 4.

 7. Raychaudhuri, PHAI, p. 38. According to Pargiter, "the principalities on the Sarsavati and at Indraprastha disappeared, and Hastinapura remained the outpoot of the Hindu kingdoms of North India" (AIHT, p. 285)

 8 Pargiter, AHT, pp. 328, 230, 15.

 10. Dick, Alley, D. 1, 4, 9-10, 15.

 10. Dick, Alley, D. 1, 4, 9-10, 15.

 11. Chikadongu Up, I 10. "Matachihateshu Kurushu"

 12. AIHT, p. 285

 13. Pargiter, AIHT, pp. 289-70.

 14. JASE, 1914, p. 321

 15. Rhys Davids, Buddhist India n. 320

- 15 Rhys Davids, Buddhist Indua, p 39.
 16 Such as Sāgarndeva, Eharata, Angurasa, Ruchi, Suruchi, Pratāpa, Mahāpratāpa, Sudaršanan, Mahāsammata, Muchala, Kalyāna, Šatadhanu, Mākhadeva, Sādhina
- Law, Tribes, p 127 Ibid. pp 125-7. CHI, I, p 180 17
- 18
- 20
- PHAI, p 89
 Parguer, DKA, pp 18-22
 Maissia P 272 1 Brihadratheshrotiteshu Vithlotreshv = Avantishu; Pulakah srāmmam hatvā svaputramabhishekshyati
- 23 Cf Matsya P, 272 6; Vārānasyām sintan sthāpya 24 Cf Matsya P, 272 6; Vārānasyām sintan sthāpya 25 Law, Tribes, p 32. 26 Raychaudhuri, PHAI, p 122

- Tribes, p 127
 36. Cf Jātaka Nos 515 (Sambhava), 489 (Suruchi) and 545 (Vidhurapandita).
- CHI, I, p 316 Hardy, Manual of Buddhism, p 163 n

BOOK FIVE THE AGE OF THE RIK-SAMHITA

CHAPTER XVI

LANGUAGE AND LITERATURE

THE language of the Rigveda is the oldest known Indo-Arvan language. In several respects,1 it is true, its specific characterization has gone further than that of the oldest forms of Iranian speech known to us. But that does not warrant the assumption that the Rigvedic language is later than Gathic Avestan. For the innovations differentiating the language of the Rigveda from that of the Avesta are for the most part not such as may be expected to develop in course of normal and gradual evolution, but are rather suggestive of a violent deflection from the natural course. Thus the normal and natural tendency of all the known Indo-European languages has been to spirantize the occlusives either through an overdose (as in Germanic) or through an underdose (as in Celtic) of expended expiratory energy; but the language of the Rigveda, instead of spirantizing the Indo-Iranian occlusives, has on the contrary occluded a number of Indo-Iranian spirants, eliminated some, and retained only the surd sibilants. The appearance of a whole series of cerebrals, unknown in any other Indo-European dialect, points, likewise, rather to violent deflection than to gradual evolution. Similar violent deflection from the normal course of evolution cannot, however, be pointed out in Iranian. It would, therefore, be wrong to consider the innovations of both Avestan and Sanskrit in the same light, or to draw any conclusion as to their relative chronology from a comparison of those innovations

Regarded from this point of view, it would moreover seem that the whole problem of Indo-European phonetics requires restatement and reconsideration. It has been always tactity assumed that Sanskrit, which possesses so few spirants, gives the truest picture of Indo-European consonantism; but that is, at the best, an unproved hypothesis What is an incontestable fact is that a strong spirantipolity of the property of the property of the property of the property of the velars.

Moreover, in all the better known Indo-European dialects of the historical age, the number of spirants is much larger than in Sanskrit. And when we add to all this the further consideration that in actual pronunciation the true occlusive—which is in each case an ideal norm between the results of the expenditure of too much and too little expiratory energy—is hardly ever heard in any language, then perhaps it would seem obvious and necessary to

consider the imposing system of occlusives registered by Sanskrit grammarıans not as a faithful picture of the original state of things in the basic Indo-European, but as the result of later variation.

It is not too much to suggest that also the sonant aspirates, which are found in no other indo-European dialect, are but the Indian version of Indo-European sonant spirants. It appears, therefore, that not only the Indo-European vowel-system has been fundamentally transformed in Sanskrit, as is universally recognized to-day, but also that, at least in one respect, namely in respect of spirants, Sanskrit consonantism has innovated no less. And this holds good for the oldest recorded form of Sanskrit, namely the language of the Riverda.

The Rigvedic language is hieratic, and therefore to some extent exclusive and artificial; but it is on that account by no means an instrument of mere suggestion without any power of direct and forceful expression, as is the case, in a great measure, with Classical Sanskrit. On the contrary in pithness it excels even the Latin of the Classical Age. That is largely because the Rigvedic poets strove throughout to present a complete idea, though not always a complete sentence, in every verse-foot (pdda). Padas of this kind, usually of eight to twelve syllables, were naturally not easy to construct, and, therefore, ready-made Pādas have often been repeated in the Rigveda with or without any material variation, though not so indiscriminately as were the Homeric verse-fragments in the Iliad 2

The verb generally used in the Rigueda to express the art of versification is taksh, which literally means "to hew." Just as a carpenter, by applying the art of his trade, constructs beautiful pieces of furniture, so does the poet-karu (literally: "manual worker")-manufacture beautiful verses and hymns with which to win the favour of the gods, either for himself, or more frequently, for his patron Such hymns were regarded directly as gifts of gods (devatta). It is clear that verse-making had already become a recognized profession in the Rigvedic age, and also that this profession had become a monopoly of the priestly classes. In the hands of the professional verse-makers Rigvedic poetry attained an amazing degree of technical perfection, but true poetry could not and did not flourish in the Rigvedic atmosphere, surcharged as it was with a spirit of bargaining between gods and men. Poetry of a high order springs either from absolute self-surrender, or from absolute individualism. But the spirit of Rigvedic poetry always oscillates between these two extremes, without ever attaining the highest altitude of either. Barring the all-pervading element of ritualism that has deadened its life, Rigvedic poetry therefore strikes the reader as intensely human, though not as actually sublime. With these

few preliminary remarks about Rigvedic language and literature, we shall now proceed to a more detailed analysis of both.

1. LANGUAGE

In its phonetic structure the Rigvedic language shows practically the same sounds as the Classical Sanskrit, the only notable exceptions being l and lh, which take the place of intervocalic d and dh in the Rigueda. But the frequency of the sounds is not the same in the Rigueda and in Classical Sanskrit. The relative frequency of r and l in Rigvedic and later language is highly interesting. In the older language, t is of rare occurrence, but it extends its sphere more and more at the expense of r, and it is well known that in the Prakritic stage some dialects of eastern India had completely eliminated r. It is also well known on the other hand that in ancient Irānian every Indo-European l had become an r. During the intervening period, of which roughly the first half is covered by changing and living Sanskrit,3 r lost more and more ground to l. In the later portions of the Rigveda, I is eight times as frequent as in the older parts, and in the Atharvaveda it is seven times as frequent as in the Rigveda 4 Thus it is clear that increase of l in frequency went hand in hand with the progress of the Aryans towards the east. In a passage often repeated in the Brāhmanas it is said that the Asuras suffered defeat at the hands of the gods because they mispronounced the word arayah as alayah. This would suggest that in the later Vedic age, when the word asura had lost its original meaning and became a general term of opprobrium, the propensity of the easterners to pronounce l for r was noticed and frowned upon by the orthodox Aryans. Or it may mean that the Asuras referred to were none but those of the incoming Arvan tribes who, being of a particular group with its particular phonetic laws, not only retained unchanged the Indo-European l, but also made it the representative of Indo-European r.6 In short, the behaviour of l and rin the Rigueda suggests as clearly that the invading Aryans were not quite homogeneous in speech as the increase of l at the expense of r suggests increasing eastern influence on the Vedic language.

That the Rigvedic language was not quite homogeneous is provalso by its lack of uniformity in regard to Fortunatov's law. According to this law, Indo-European 1, when followed by dental occlusive or s, disappears after cerebralizing the following sound, whereas Indo-European r under similar circumstances remains. Thus in Skt. jathara., the -th- is derived from Indo-European -ith- (cf. Gothic kilithei), and in Skt. bhāshate, the -sh- is derived from Indo-European -la- (cf. Lithuaina balsas); but in Skt. vart- vars-, the r in the sound-group -rt- and -rs- (both of Indo-European antiquity, cf. Lat. verto, Gr. erse)has not disappeared. These and other similar examples seem to prove Fortunatov's law; but there are excep-

tions. Indo-European l + dental has clearly developed into -rt- in Skt. jartu- which is a side-form of jathara-, and is, like it, connected with Goth. kilther, and in Skt. karshû, which is connected with Greek telson, the l of the Indo-European consonant group -ls- has not disappeared as Fortunatov's law would have it, but has become r. De-occludization of some occlusives in the Rigueda shows that this characteristic of the Präkrit dislects was latent also in the cidest Sanskrit. Thus we find h for dh in the verbal ending -hi for -dhi, in hita from dha-, in griha from *gridha, etc., h for bh in grah-, a side-form of grab-; in dah- from dhadh-, etc.

Apart from these significant details which seem to challenge the claim of the Rigvedic language to have been a homogeneous one, there are others which definitely prove that to some extent it was also artificial. Thus it can hardly be an accident that in the Atri-Mandala (fifth) there is not a single infinitive form in -tu, the Kanvas, the reputed authors of the first and the eighth Mandalas, seem to have intentionally avoided using infinitive forms in -tum and -tava; the Vasishthas, the authors of the seventh Mandala, show a similar aversion to absolutives in -tvā and -tvāya. Moreover, perfect forms like yamatur (VI, 67 1) and skambhathur (VI, 72, 2), without reduplication, must be regarded as purely artificial momentary formations like the non-reduplicating second person dual perfect takshathur (X. 39. 4), formed perhaps in imitation of the third person plural preterite takshur (II. 19. 8), which in that case must have been mistaken for a perfect-form as Wackernagel7 has suggested. This also proves in a striking manner that the language of the earlier Mandalas was already in danger of being misunderstood when the hymns of the tenth Mandala were being composed.

Intentional imitation of the earlier parts of the Rigierda in the later parts is clearly proved in the case of the group of hymns X. 20-26, the author of which "has emphasized his dependence on earlier tradition by prefixing to his own group the opening words of the first hymn of the first book." At any rate, parts of the earlier Rigierda must have become part of the ritual tradition at the time of the author of the hymn X. 181, for he mentions the fact that the Rathantiara-sāman is chanted to a couplet composed by Vasishtha (VII. 32. 22-23) and the Brihat-sāman on another composed by Bharadvāja (VII. 46 1-2).

On the whole, however, the language of the first nine Mandalas must be regarded as homogeneous, in spite of traces of previous dialectal differences, particularly in the treatment of τ and l, and of faint suggestions of particular mannerisms of different composer-families. With the tenth Mandala it is a different story. The language has here definitely changed. The difference in language between the earlier Mandalas and the tenth would have appeared

in its true proportions if the texts concerned had been written down at the time they were composed and handed down to us in that written form.

The fact, however, is that the text-tradition of the Riggeda was stabilized at a comparatively late date, and fixed in writing at a much later epoch. The result has been not unlike what would have happened if the works of Chaucer and Shakespeare were put in writing and printed for the first time in the twentieth century: in short the text of the Rigveda as handed down to us is, in various details, not only different from what it actually was, but to some extent also screens the differences that mark off the languages of the earlier Mandalas from that of the tenth. 82 The evidence of the metres, which, inter alia, demand a heavy penultimate in verse-feet of ten or eleven syllables but a light one in those of eight or twelve.9 clearly proves that the actual pronunciation of the word pavaka must have been pavāka in the Rigyedic age, but the fact has been completely suppressed in the traditional text. Similarly, on the evidence of the metres, the word chhardis seems to have been without an r in the Riqueda, and very probably the redactors of the Rik-samhitā in some passages intentionally altered chhadis into chhardis for reasons that cannot now be ascertained. 10

Apart from these and other sporadical instances of misrepresentation.11 the text of the Riqueda has in various respects undergone a fundamental rehandling that has to no small degree altered its original character. In the original text, there was hardly ever sandhi between the end of a verse-foot and the beginning of another. as is clearly indicated by the evidence of metres, but the final redactors have systematically joined them in sandhi wherever possible.112 though they did not apply their misguided zeal to cases of non-sandhi within the verse-foot. The application of abhinihitasandhi (absorption of an initial a- into a final -e or -o) is in this regard highly interesting. Whether within a verse-foot or between two verse-feet, the abhinihita-sandhi in almost all its instances has to be dissolved in reading. But the fact is that this sandhi is found in the written text regularly between two verse-feet (i.e. where it should not have taken place at all), but within the verse-foot its occurrence is irregular and facultative, seemingly without any principle. Similar, though not quite the same, is the case also with the other kinds of vowel-sandhi in the Rigveda, such as kshaipra (i.e. the change of a preceding vowel into the corresponding semi-vowel before a dissimilar vowel) and Praslishta (i.e. coalition of two similar vowels into a long one), for they too have to be dissolved in reading, often within the verse-foot and practically always between two verse-feet. But semi-vowels which are not the result of kshaiprasandhi have also to be very often dissolved (iyadipurana).

The evidence of metre shows, moreover, that not seldom a short vowel has to be inserted in reading between a consonant and an r immediately preceding or following it in the same word (thus indra has often to be read undarg). This inserted vowel sometimes reveals tiexional forms which otherwise would never have been discovered. Thus apparently the stems in -i, -u, ri take the endings -yoh, voh, and -rot respectively in genitive and locative dual as in the classical language, but readings restored with the help of the metre clearly show that the normal ending in the Rigvedic age was dissyllabic in each case; the traditional text has adopted these monosyllabic endings, evidently under the influence of the later language, 12 The case of long 7 is rather peculiar. As a rule it is found in the written text only in those forms which are palpably similar to other forms with other long vowels: thus pitrin is written with long ri because palpably similar forms such as munim or sadhun show a long yowel. Otherwise the short ri in the Rigveda represents also the long ri. Thus in dridha the short re stands for long ri that is demanded both by grammar and orthoppy. Frank cases of Prakritism are jyotis from dyut-, ushtanam13 for ushtranam, sithira for śrithira. sure duhita (I. 34. 5) for suro duhita (VII. 69. 4), etc. On the other hand, words like nida (from *ni-zd-a), dülabha (from *duz-dabh-a), shodaśa (from *shash-daśa), etc., could have been formed only at a pre-Vedic stage of the language.

Such a pre-Vedic stage is suggested also by forms of the socalled flexion forte of a number of i-stems and u-stems, found only in the Ryveda and certainly of Indo-European antiquity. Vowels of dissyllabic value are a precious relic of Indo-European antiquity, the commonest case being the ending -ām in the genitive plural which has often to be read as -aām. The use of a verb-form in the singular number when the subject is a plurality of neuter things was the normal rule in the original Indo-European of which ample evidence is found in other Indo-European dialects, but in the Rigueda we have only one sure instance of this usage, namely dhrishave dhiyate dhanā (I. 81. 3).

The verbal system revealed by the Rigueda is infinitely more complex than that of Classical Sanskrit, and yet what we find is a drastically simplified form of what it was in the basic Indo-European language. Thus the original thematic ending o in the first person singular has been preserved only in thirteen subjunctive forms, 1° but in other subjunctive forms of the first person singular it was extended by -ni that came to be associated with it already in the Indo-Irānian epoch. The active ending in the first person plural seems to have been -mes in the original Indo-European on the evidence of Greek and other languages, but the ancient Irānian dialects know only -masi; 1° in the Rigueda both -masi and -mas occur side by side, the former being more than five times as frequent as the

latter; in the Atharvaveda -mas becomes commoner than -masi, and in the classical language -masi disappears altogether. The augment has retained in the Rigveda its original character of an independent preverb, and as such is very frequently dispensed with when the past sense is clear from the context. The forms thus obtained are either of the indicative or of the injunctive mood, almost equal in number in the Rigveda, the injunctive forms being in about one-third of their occurrences governed by the prohibitive particle mā.\(^{12}\) In the classical language the augment can be dropped only when in construction with this prohibitive particle. The perfect is not necessarily a tense of the past as in Classical Sanskrit, but is merely suggestive of the fullest amplitude of action. It is pronouncedly suggestive of past action only when preceded by adverbs like parā "formerly," but it can also be governed by particles like niñam "now."

On the whole the Rigvedic verb expresses more the modes and aspects of action than the time of occurrence, if the augment, which was not an integral part of the verb, is left out of consideration. The subjunctive mood is in full bloom in the Rigveda, but was completely eliminated from the classical language. On the other hand, the optative, though not so popular as the subjunctive in the Rigveda, has been retained throughout. The future tense which was in origin a desiderative present was in the Rigveda still in the process of changing its rôle. It is still in its beginnings, and the Rigveda forms a future stem only from fifteen roots.

The language of the tenth Mandala represents a distinctly later stage of the Rigvedic language. 18 Hiatus, which is frequent in the earlier Rigveda, is already in process of elimination here. Stressed u cannot in sandhi be changed into u v in the earlier parts, but in the tenth Mandala they can The ending -asas in nominative plural is half as frequent as -as in the Rigveda taken as a whole, but its number of occurrences is disproportionately small in the tenth Mandala. Absolutives in -tvāva occur only here. The stem rai- is inflected in one way in the first nine Mandalas, and in another in the tenth.19 and in the inflexion of dyau-, too, the distribution of strong and weak forms is much more regular in the earlier Mandalas. The Prakritic verbal stem kuru- appears only in the tenth Mandala for the earlier krinu-. Many words appear for the first time in the tenth Mandala or are shared by it only with the interpolated parts of other Mandalas. The old locative form pritsu, adjectives like girvanas and vicharshavi, and the substantive viti do not occur at all in the tenth Mandala, though in the earlier Mandalas they are quite common. The particle sīm, which is unknown in the Atharvaveda, occurs fifty times in the first nine Mandalas but only once in the tenth. Words like āiya, kāla, lohita, vijaya, etc., occur for the first time in the tenth Mandala, as also the root labh-. Words shared with the tenth Mangdala only by the interpolated parts of other Mangdalas, the Vālakhilyas, and unmistakably late hymns are loka (for earlier uloka which is a haplology for uruloka), mogha, visarga, gup- (a back-formation from gopa), etc. And words which occur mostly, though not exclusively, in the tenth Mangdala and these parts, are sarva, bhagavant, prāva, hridzya, etc. The archaic particle if of pronominal origin, for which the Padapāṭha throughout wrongly reads im, does not occur at all in the tenth Mangdala, and the particle im, which is only less archaic than i, occurs in it only about half a dozen times.²⁰ Of forms like dakshi, aduksha, etc.,²¹ which are the results of the action of a pre-Vedic phonetic law,²² only one, namely dudukshan, occurs in the tenth Mangdala. It is unnecessary to dilate any further on the language of the Ripvead

2. LITERATURE

The Rigvedic literature is not less colourful. The earliest attempt to classify Vedic hymns systematically according to contents to be found in Yāskās Nirukla (VII. 1-2). Stating first that the stanzas are either indirectly addressed (paroksha), directly addressed (paraksha), or are self-invocations (ādhyātmiki), Yāska proceeds to specify the characteristics and cite instances of the various types of hymns. There are, to begin with, hymns in pure praise of the deity without any prayer, as, for instance the Indra-hymn 1.32, bearing unmistakable characteristics of a popular ballad. 5-3

- The heroic deeds of Indra shall I proclaim, the deeds that the thunder-wielder performed first.

 He slew the dragon, freed the waters, slit the bowels of the hills.
- He skew the dragon resting on the hill.
 Tvashiā had forged for him the shining thunder,
 And the waters springing forth rushed towards the ocean,
 like cows lowing (at the sight of their calves).
- Like a broken reed there he lay.
 Over him flowed the waters gladdening hearts;
 Those whom Vritra held beleaguered by his body—
 at their feet now he lay.
- 11. As Dāsa-wives stayed the waters guarded by the dragon, like the cows restrained by the Panis:

the watery pit which was sealed,—that he opened by slaying Vritra, and released the waters.

15. Indra is the monarch of all that move and rest, the thunder-wielder is monarch of tame and horned animals:

He indeed is ruler of all the peoples; like a felly round the spokes of a wheel he protects all. Mantras of the second type, according to Yaska, are those in

which the poet prays for favours without praising the deity. It is significant that Yaska cannot cite a single Mantra of this type out of the Riggeda, but adds that they are plentiful in the Yajuryeda Oaths and imprecations constitute the third type according to Yaska, and he cites as instance Riggeda VII, 104, 15: "May I die to-day if I am a sorcerer or if I have tried to take a man's life by sorcery. but may he, too, who falsely called me a sorcerer, bewail the death of ten grown up sons." Fourthly, according to Yaska's classification, there are hymns containing objective descriptions of particular states, and, significantly enough, he cites as a specimen the cosmogonical hymn X. 129. "Then there was neither death nor immortality, etc." In the fifth category are included by Yaska the Mantras expressive of apprehension, such as X. 95. 14: "The benevolent god may fly forth to-day and never return."24 Lastly, according to Yaska, there are hymns of which the purpose is to administer censure or praise, and as an illustration he cites that unique hymn. namely X 117:

1 Hunger was certainly not meant as a means of death by the gods. For also him who has eaten his fill, death befalls in various forms;

The wealth of the liberal is never exhausted, But the stingy person never finds a friend.

 He who though possessing food, to the broken and begging destitute, approaching him, refuses a morsel,

And hardens his heart against him even though he had served him before.

he too, likewise, never finds a friend

 He indeed is a patron who gives to the beggar, longing for food, wandering and thin,
 Who then readily responds to his call to arms,

and also thenceforward becomes his friend.

4 He is no friend who does not give to the friend —to the comrade asking for food:

Let him turn away from him, with him there is no shelter, rather seek shelter with a generous stranger.

 Let the wealthier person be generous to the applicant; let him take a longer view;

For life rolls on like the wheels of a chariot, wealth comes now to one, now to other.

6. The food earned by the fool is in vain, truly say I that it is death to him:

He feeds no comrade nor a friend; he eats alone and also bears the burden of his sins alone.

Only when ploughing does the plough-share produce food; only by walking can a distance be covered;

A Brāhmaṇa who can speak is preferable to one who cannot, A liberal friend should be better than an illiberal one.

The hymn is packed with noble sentiments, and its every word is charged with vigour. Yet it should not be forgotten that the hectoring eloquence of this energetic priest was probably directed mainly to the purpose of frightening the wealthy into ceding a part of their wealth to the Brähmanas especially, and not to the poor of every class, for of genuine sympathy for the poor there is not much in the Rioveda.

Yāska's brief and purely formal classification of the contents of the Mantra-texts is, however, anything but satisfactory. It is true that the main body of the hymns contains praises or prayers or both. But from the literary point of view they should best be regarded as lyrical poems adapted to the purpose of ritual. Of these the hymns addressed to Heaven's daughter Aurora (Ushas) are perhaps the oldest and certainly the most beautiful. They have something of the lyric beauty and love of nature of Shelley and Wordsworth, and one cannot help feeling that they were inspired by the sight of the sunrise over the snowclad peaks of the Himālayas A few stanzas of the first hymn to Ushas (I. 48) will suffice to reveal the spirit of simple adoration in which the goddess was invoked by the Rishis:

- Light us up with happiness, O Ushas, daughter of heaven, with great lustre, O radiant one, with wealth, O bountiful goddess.
- Like a fair maiden comes Ushas, gladdening (all), she comes awakening four-footed beasts, and makes the birds rise into the air.
- O Ushas, shine with shimmering radiance, O daughter of heaven, bringing us ample happiness, as you shew your light upon the daily sacrifice.
- The breath and life of the whole world is in you,
 O noble one, as you shine forth;
 - as such, O resplendent one with towering chariot, give ear to our cry. O bestower of various gifts.
- 11. O Ushas, win then (for us) the prize that is admired among human folk.

With that, hasten to the sacrifices of your worshippers, the sacrificers who are chanting your praises.

14. Whoever were the Rishis of old that invoked you for protection and support. O noble one.

Yet accept our hymns and bestow on us a sift in token of your satisfaction, O Ushas, with brilliant lustre.

Here it is simplicity and not greed that is begoing of the goddess gifts and more gifts. But it cannot escape even the most superficial reader that in hymns such as this the means that the noets have in view for attaining their object is simply to please the delty by flatter-

ing songs and ritual sacrifices. There is no suggestion as yet of a belief in the existence of a supreme justice from which flow all punishment and reward. In the hymns to Varua, however, this sentiment is already in the horizon. The hymn to this god by Kürma Gärtsamada (II. 28), for example, opens in the usual flattering tone:

1 May this (hymn) addressed to Aditi's son who is wise and self-supreme excel all the existing (hymns) in greatness; The god whom it is exceedingly pleasant to worship.—

of that affluent Varuna do I beg glorious fame.

But the tone soon changes, and adulation turns into admiration for god-created cosmic harmony:

4. Aditi's son unleashed them (i.e. the rivers) and

started them on various paths,

the rivers course along in obedience to Varuma's ordinance;

Never released are they, nor ever tired,

like birds they swiftly fly in never-ending course
(lit. round the earth).

Loosen the bond of sin like a girdle, O Varuna;

We shall fully conform to the rule of equity you have ordained.

May not the thread snap while I am still weaving my prayer-

may not the measuring-rod break out of season.

6. Avert terror from me, O Varuna,

be kind to me, as a righteous ruler.

Release me from anguish, as a calf from the rope;

not even for a moment can I live away from you.

7 Do not strike us, Varuṇa, with the weapons which, in your search.

O Asura, destroy those who commit sin

May we not have to bid adieu to light;

loosen the hold of the envious on us, so that we may live That virtue is its own reward, and, as a spirtual quality, is incommensurable in terms of material advantage, does not seem to have been realized by the Rigvedic poets. The spirit of the people that peeps through the thick veil of ritual pedantry is one of gladness, sapiring ever for more, never knowing rest or contentment Absence of evil is not what they pray for most. Their supreme desire is to triumph over poverty and resistance. Their chief god is Indra who does not possess a single spiritual trait. But their minds are fresh, and, therefore, deeply impressed by the violence of natural phenomena. Atri's hymn (V. 83) to Parjanya (the storm-god) is perhaps the most striking example:

He strikes down the trees, he strikes also the Rakshasas, the whole world is afraid of (Parjanya) carrying mighty arms.

Even the sinless quake before the bull-like god, when Parjanya, thundering, strikes the evil-doers.

 Like the charioteer lashing forward his horses by the whip does he announce the messengers of rain,

Lion's roars from a distance are heard,

When Parjanya renders rainy the sky.

 Winds blow fast and lightnings flash, plants shoot up and heaven swells; Quickening showers fall for all

when Parjanya gladdens the earth with his seed.

7. Roar and thunder, sow the seed,

come flying hither in squelching car,

Turn downward the skin unbound.

so that be levelled high lands and low.

Hymns of this type are unique in world literature, for nowhere else can the deification of natural phenomena be so clearly perceived Martial spirit is well reflected in hymn VI. 75, though, evidently, it is not a real war-song, but rather a magical incantation supposed to secure victory in battle:

. 1. Like a thunder-cloud becomes his face,

when the mailed warrior plunges into the thick of battle

Be victorious without being injured in body, may the strength of the armour protect you

2 By the bow we'll win the cattle, by the bow the battle, by the bow shall we win the mighty struggles.

The bow destroys the enemy.

by the bow shall we conquer the regions.

 As if to whisper the string nears the ear, holding in embrace its dear friend (the bow);

Stretched on the bow it lisps like a girl, this string, that helps on to victory

The din of battle is always in the background of the Rigvedic stage, but the poets, being for the most part priests, failed to give anything like a true picture of it. Yet, sometimes, the priests themselves were present on the battle-field. The Bhārata-army succeeded in crossing the rivers Vipāš and Sutudri only when Viśvāmitra by his eloquence persuaded them to lower their level. The colloquy between the priest and the rivers (III. 33) is quite interesting. Save Viśvāmitra

3. To the most motherly stream have I come.

the broad and propitious Vipas have we reached:

One the other licks like the mother-cow her calf,

as in the same bed they follow their course.

Not to be taken in so easily, the rivers ask suspiciously:

4. Swollen thus with a flood of milk

do we flow along the god-created bed; Our course, once in flow, can not be stopped: with what object does the sage invoke us?

And Viśvāmitra comes pat with his request:

 Stop in your course a moment, O true ones, listen to my Soma-sweet speech;

An ardent prayer to you I address; seeking help Kusika's son invokes you.

The rivers at last agree and express their consent with the words:

10. We shall do as you say, O poet,

since in cart and chariot you have come from afar, To you shall I stoop as the mother swelling (with milk to her

child).

like a maid her lover shall I obey you.

The most famous and interesting of the dialogue-hymns contained in the Rigweda is the one (X. 95) in which the mortal Purūravas tries but fails to persuade the nymph Urvaši to continue to live with him The lure of paradise is too much for the fickle female She leaves her mortal lover, and her last words (verse 15) are cruel and cynical, though not unsympathetic:

Purūravas, do not die, do not perish (?)

Let not the cruel wolves devour you; The friendship of woman is never indeed firm,

for they are hyenas in heart.

These dialogue-hymns may be regarded as dramas in embryo (not necessarily for the stage). In most cases they are obscure. But there is nothing to justify the theory-25 that the verses were once connected by prose narrative now lost. The dialogue-hymns, though in most cases clearly of secular origin, must have been utilized in some sort of ritual drama, for otherwise it is difficult to explain their inclusion in the Samhlitä.

Though Rigvedic poetry is predominantly lyrical, the Sāmhitā contains not a single hymn that may be called a love-poem. In the Atharvaveda, too, we have only love-charms. This is difficult to explain, specially when so many different types of hymns of non-religious origin are included in the Rigveda. One of them is the well-known and oft-quoted satirical frog-hymn (VII. 103):

1. Hibernating throughout the year

like Brāhmins observing a vow, Animated by the divine Parjanya

the frogs are now croaking loudly.

When heavenly showers fall on them, lying in a pond like shrivelled skins,

THE VIOLE AGE

Like the lowing of cows for their calves, sound the voices of frogs in unison.

sound the voices of frogs in unison.

3 When showers fall on longing creatures

and slake their thirst at the start of the rainy season, With rapture in the voice, like the son his father,

they greet each other without cessation.

5 One repeats the word of another,

like students echoing the voice of the teacher;

Together they form a chorus,

when at rain-fall loudly they croak.

Another remarkable hymn of non-religious origin is the merry song by Siśu Angirasa (IX. 112) with the refrain "flow O Soma for Indra's sake".

Diverse indeed are our aims.

different are the tasks of men,

The builder seeks for cracks, leeches for the sick, and priests are greedy for sacrifices

2. With seasoned timber of ancient trees

and the feathers of birds,

The goldsmith seeks those who possess gold, ready with his furnaces and precious gems

3. A bard I am, my father a leech,

and my mother is a grinder of corn; Diverse in means, but all wishing wealth,

equally we strive for cattle

The fourth and concluding verse is coarse in expression, fore-shadowing verses of the same brand in the Atharoaveda. This hymn is of particular importance also for the light which it throws upon the caste-system in the Rigvedic age, for it shows clearly that professions were not yet determined by birth. But there was already a fully developed class-system dating from the Indo-Irānian epoch, as is unavoidable in every society that has outgrown the savage state; and inevitably the professions in the Rigvedic class-system already showed a distinct tendency to become hereditary.

Disa princes like Sambara. Dhum, Chumuri, Pipru, and Varchin have been actually mentioned by the Rigwedic poets, but it is significant that, as a rule, Indra himself has been made to combat them on his own initiative and not in course of rendering merely routine assistance to Aryan chiefs 2° For it shows that even in the heyday of Rigwedic culture there was no longer a living memory of the first encounters with the aboriginal races. 2° At the time of the Battle of the Ten Kings (dāśarājňa), however, which is the central event of the history of the period (ante, p. 250) when the Aryan tribes began to feel themselves secure enough to indulge in the luxury of fighting each other, Indra is invoked only to render aid, but not to lead the onslaught. This significant difference in the treatment of

previous and contemporary events would seem to suggest that the priestly poets of the Rigvedic age were not without a semblance of historical sense.

On the other hand, the hymns, which in the absence of anything better are taken to be historical poems, namely the Dānastutis (psalms in praise of munificence), are generally made-to-order pedestrian compositions without any historical data of real value. Generally they are sets of three to five verses appended to a hymn of the usual type. Only one hymn (I: 126) is enturely a Dānastuti, and that one is perhaps the worst in the Rigveda:

- 1 No bad hymns am I offering by exerting my intellect In praise of Bhavya ruling on the Indus, Who assigned to me a thousand sacrifices, The incomparable king desirous of fame.
- 2 A hundred gold pieces from the fame-seeking king Together with a hundred horses as a present have I received, I, Kakshivant, obtained also a hundred cows from my master, Who exalted thereby his fame immortal up to heaven
- 3. Dark horses given by Svanaya, and Ten chariots carrying slave-girls fell to my share; Followed a herd of sixty thousand cows, All this as sacrificial fee did Kakshiyant receive at the end
- All this as sacrincial fee did Kakshivant receive at the end of the session.

 4. Forty ruddy horses of the set of ten chariots
- Are heading the column of a thousand cows; Fiery steeds decorated with pearls
 - Have the Kakshivants and Pajras received.
- After the first gift, I received Three chariots and eight cows capable of nourishing even a rich patron

For you, my good relations, who, as clan-fellows,

Driving in chariots, hankered for fame.28

This dismal hymn ends with two more verses notable only for their extreme obscenity. It is in these Dānastutis that Brahmanical greed appears in its worst aspect in the Rigveda.

Scarcely less debased than the Dānastutis are the Apri-hymns,29 manufactured artificially for employment in animal-sacrifice. Every priestly family has its own Apri-hymn, and all of them (ten altogether) are constructed in the same pattern. Eleven different deities and deity-groups in as many different verses have been invoked in each Apri-hymn in the same order. Only in regard to the second deity there is evident uncertainty, for in four Apri-hymns it is Tanūnapāt, in four other Narāšańsa, and in the first two Apri-hymns we find as second deity both Tanūnapāt and Narāšańsa, each with a verse for himself. Moreover at the end of the second Apri-

hymn, there is a special verse invoking Indra. Thus the first Aprihymn consists of twelve, the second of thirteen and each of the rest of eleven verses. The Apri-hymns, though of no literary value, are of immense importance for the history of Vedic religion. They prove conclusively that also in the oldest period, as at later epochs, ritual had never been fully standardized. There is no reason to doubt that these hymns were actually used at animal-sacrifices as raddition maintains. But there is nothing in the Apri-hymns to suggest that in the Rigvedic period the animals sacrificed were regarded as substitutes for the sacrificers themselves as was the case in later ritual. ²⁰³

The funeral hymns too seem to have been composed specially for ritual purposes, but they contain truly noble sentiments. As cremation and burial were both in vogue, we have both burial and cremation hymns. But the character of the respective hymns leaves scarcely any doubt that burial was the earlier custom It is significant that the deceased, if a man, still holds a bow in his hand, which the priest takes away from him at the time of burial with the words (X 18. 9):

The bow I take from the hand of the deceased for our power and glory and strength: Even there where you lie may we as good heroes repulse all the attacks of the foes

The martial spirit of the Vedic Aryans finds truest expression in this verse. Even at the moment of death the thought supreme in their minds is that of war. Twice in the Rigueda man has been called mrityubandhu "regarding death as a relation." The Riguedic Indians were passionately fond of life, but they were not afraid of death. A gentler but more sophisticated spirit is revealed by the cremation-hymn X 16:

- 1 Do not burn him, Agni, do not scorch him either, do not tear asunder his skin or body; When you have devoured him, O Jātavedas, then do you send him on to the Fathers.
- When you have devoured him, O Jätavedas, then do you give him over to the Fathers;
 When he reaches the other world of the dead, then may he obey the will of the gods.
- 3 Let the eye go to the sun, let the breath go to the wind; to heaven or to earth according to their desert; Or to waters go, if that is your lot,

or set you up in the plants with your limbs.

The last verse is of special interest for various reasons. Pantheism of a primitive variety is discernible in the first line. The second line suggests the idea of retribution though as yet far short of the philosophical doctrine of Karma. Belief in a life after death is also

revealed in this verse, but there is no suggestion as yet of belief in hell or rebirth. The first occurs only in the Atharvaveda, and the second clearly appears for the first time in the Upanishads.

Quite a number of philosophical hymns are contained in the Rigueda, and they have been often discussed and translated.30 An important point to note in this connection is, however, that the terms māyā and rūpa-on which hinges the whole of later Vedānta philosophy-have been used already in the Rigueda precisely in their Vedanta sense.31 "Rūpa" in the Rigveda never signifies real form, but only the transient and deceptive appearance, and "maud" in most passages has been used to signify only that occult power by means of which the deceptive appearance can be assumed or discarded.32 If the doctrine of maya and rapa is the essence of Vedanta (end of Veda), then it may as well be called Vedadi (beginning of Veda).

Nowhere in ancient literature have the gods been more concretely conceived as in the Rigueda, but the same Rigueda also reyeals the fact that already there were some who would believe in the existence even of Indra, the most concrete of the Vedic pantheon. Quite in the strain of "O God, if there be a God," a poet in the Rigveda makes this astonishing remark (VIII, 100, 3).

Chant the hymn, striving for strength,

unto Indra the truthful, if indeed he exists.

One says to other, "Indra does not exist, who has him seen? whom shall I praise?"

But in the next verse is heard already the voice of Krishna in the Bhagavadgītā. For Indra replies:

Here am I, look at Me, O singer,

all beings I excel in greatness;

Behests of the cosmic order magnify Me.

for I rend the worlds when I am bent on rending them. The Rigvedic conception of concrete gods will be dealt with more fully in Chapter XVIII.

^{1.} As, for example, the use of the cerebral series and the levelling of short diph-

² Gilbert Murray says of the Iliad "We often find, too, that descriptive phrases 2 Gilbert Murray says of the Iliad "We often find, too, that descriptive phrases are not used so accurately to fit the thing described. They are caught up ready made from a store of such things perpetual epitheis, front halves of lines, back halves of lines, whole lines, if need be, and long formulae. The stores of the poets were full and brimming A bard need only put in his hand and choose out a well-sounding phrase Even the similes are ready-made." (The Rise of the Greek Epic, second ed. p. 289). All this may be maintained, also of Riyedic poets, and the same part of the days of the grain, whom I place in the fifth ceabury B C, Sanakrit was still a living language of some sort. But in an elays of the grainmarian Patafiell at Latin prediction of any case, Sanakrit had ceased to be a living language long before the days of Aśoks. Cf. Keith MSL op. 8-17.

Sanstri And Cassed to be a luring impused none perfore the days of Asoka. Cf. Kethi, BEL, pp. 8-17.

4. See Wackermagel, Attindache Gremmatik, I, \$ 191c.

5. I take this to be the meaning of the well-known passage; te'surā helaya iti perābabhicuh.

6. Cf. Wackermagel, op. cts., I \$ 192c and \$ 193a.

- 7. Ibid., p. xv. See however Macdonell, Vedic Grammar, \$ 482c. 8. CHI, I, p. 77.
- Sa. Thus in sandhi the final -n has been throughout reduplicated after a short 8a. Thus, in sendat the insal -n has been unroughout reduplated after a score vowel when the following word begins with a vowel. But in which the final -n had been originally followed by a consonant, (See my Linguistic Introduction to Sanaérit, p. 57).
 9. See Richyridalships, XVII. 39.
 10. If obbarrity is extymologically connected with Engl shield, as it is supposed to
- be, then of course the r-form must be regarded as original But this etymology is anything but certain.
- 11 It must be clearly understood that the written text, everywhere and in every as must be creaty unpersoon that the written text, everywhere and in every case, truly represents the text as it was solven it was faulty freed. It is miscorpial form. See Oldenberg, Prolegomena, p. 372, fn. 2.

 1a. For the few instances of non-sandah between Padants and Padadi in the written text though sandah was possible, see Rukprönishkhys, II. 60 ff.

 12 See Wackennagel, op ct., III, i 220.

- The form in which the word has been handed down is ushtranam. Non-cerebralization of n however shows that in actual pronunciation it was ushtanam
- See my Linguistic Introduction to Sanskrit, pp 131-2
 See Macdonell, Vedic Grammar, p 314, fn. 2
- See Thumb, Handbuch des Sanskrit, \$ 425 Anm.
- Macdonell, ibid , § 413b
- On this point see particularly Oldenberg, Prolegomena, pp. 268-70
 See Wackernagel, op cit, III, p 214.
 Ibid, p 519
- 21. Collected in Rikprättiakhya, IV. 98 These archaic forms, too, have been throughout misrepresented in the Padapatha
- 22 See my Linguistic Introduction to Sanskrit, p 45
 23 Without trying to be literal, I have tried in these translations to convey the
- Without trying to be literal, I have tried in these translations to convey the sense of the original as accurately as possible
 So thus much-discussed, but still obscure, verse has been translated by Lakshman Saruy, The Nighantu and The Nirudira, English trans. p. 114
 At less to me Dias chile, however, namely Balbutha, and adopted Aryan culture and even patronized Brähmana anagers (see Rigueda, VIII 48 32).
 Thas is a fresh argument in favour of dating the first Aryan mivision of India

- earlier and not later than the middle of the second millennium B C.
- 28 The fifth stanza is obscure; only a literal translation has been attempted.

 29. A brief account of the Apri-hymns has been given by Max Muller, HASL,
- second edition, revised, pp. 463-7 29a In later Vedic ritual, the animal sacrificed is throughout regarded as a surrogate victim which the initiated person has to immolate in order to obtain release from his vow.
- 30. See Winternitz, HIL, I, pp 97 ff
- 31 It is curious that this fact has not yet been properly emphasized by any modern investigator.
- 32. Also in the Avesta the word maya has a similar meaning, but the point has vet to be properly investigated,

CHAPTER XVII

POLITICAL AND LEGAL INSTITUTIONS

1. POLITICAL INSTITUTIONS

As a general rule, monarchy was the system of government prevailing in this age. The term Rajan, king or chieftain, is of frequent occurrence in the Rigveds. The country which the Vedic Arvans occupied was split up into numerous tribal principalities. One passage of the Rigveda (I. 126. 1) speaks of a king hving on the bank of the Sindhu, and another (VIII. 21. 18) refers to a king Chitra and other nobles as residing in the neighbourhood of the river Sarasvatī. Ten kings are described as having fought in the historic battle against Sudās (ante, p. 250). In the Dānastutis and elsewhere, a very large number of rajas are also mentioned. These passages leave no doubt that the form of government was normally monarchical, the tribe as a political unit being under a single ruler. This, of course, is to be expected from the patriarchal organization of Aryan society and from the state of constant warfare with their neighbours (aboriginal and not rarely Aryan), which was a normal feature of the life of the Vedic Arvans.

But in the Rigreda we come across terms which in later times were undoubtedly applied to non-monarchical constitutions. Thus we have references to the gara with the ganpati or jyeshiha (elder) at its head. The last probably corresponds to the jethaka of the Päli texts, and it is not impossible that there were even in this early period, the germs of the republican states of the type we meet with in early Buddhist times' (cf. vol. II, ch. I).

The passages cited above also show that, generally speaking, the kingdoms were small in extent and were units of a single tribe. Whether the confederacy of the Five Tribes who attacked Sudas actually involved a system of political organization or some sort of political collaboration cannot be definitely determined. But it is not altogether unlikely. One passage in Riggeda (VIII, 5-38) speaks of king Kasu making a gift of ten kings to a Rishi (sage) and other passages (II. 41. 5; V. 62. 6) represent Mitra and Varuna as occupying a spacious palace with a thousand pillars and a thousand gates. Even allowing for poetic exaggeration, the description postulates the existence of a royal palace of imposing proportions, and necessarily presupposes a fairly large kingdom that could boast of a capital capable of accommodating a palace of such dimensions. We have again to admit that the size of some kingdoms at least was large enough to enable the rulers to command that affluence which is so often described in the Danastutis,2 The presents conferred

by the kings on their priests were gorgeous, ample, and varied. They consisted of cows numbering thousands at times, of horses, chariots, blocks of gold, dresses and beautifully attired female slaves. Hence the wealth possessed at least by some of these rulers was considerable.

Further, it is interesting to note that we meet with the expression Samrā, which meant an "emperor" in later days, and also the idea of a universal monarch (vistasya bhuvanasya rājā).

In any case, the king occupied a position of high dignity and supremacy which was emphasized by a formal consecration and laudatory hymns. He wore a gorgeous robe, and his palace, whatever its dimensions, undoubtedly surpassed in grandeur the common dwellings of the people. On the whole the Rigneda leaves no doubt that the king was no longer merely a leader of a primitive tribe, but occupied a position of pre-eminence which was deliberaterible distinguished in all possible ways from the rest of the people.

The lines of kingly succession that we can trace in the RV raise the presumption of hereditary kingship as the normal system, but there is clear evidence that when the situation demanded it, visūh (settlements) who constituted the rāshtra (national unit) could select a worthy monarch of their own choice from among the members of the royal family or of the nobility (the rājanyas). Geldner⁴ holds that passages like X. 124.8 that are generally cited to establish the selection of a king by the settlements merely indicate their formal sanction of a fatt accompli. But the very fact of this formal sanction presupposes that the right of selection was exercised by the subjects some time earlier.

Two assemblies called sabhā and samiti formed an essential feature of the government. The term sabhā is often mentioned in the Rigueda (VI. 28, 6; VIII. 4, 9, etc.), and denotes both "the people in conclave" and the "hall" which was the venue of their meeting Since, however, the sabhā was used for the game of dice (X, 34, 6), it is clear that even non-political business could be transacted at the hall or by the people who constituted the sabhā. That it was a gathering of the elect, i.e. of Brahmanas and the rich patrons, when it was convened for administrative purposes, is clear from the term Sabheya, "worthy of the assembly," as applied to a Brahmana (II. 24, 13). The samiti in the sense of an "Assembly" of the Vedic tribe is mentioned in the Rigueda (I. 98, 8; IX, 92, 6, etc.). According to Ludwig,5 the samiti was a more comprehensive conference including not only all the common people (visah) but also Brahmanas and rich patrons (maghavan). Although it is difficult to distinguish between a sabhā and a samiti, we can provisionally arrive at some tentative conclusions. It appears that the samiti was an august assembly of a larger group of the people for the discharge of tribal (i.e. political) business and was presided over

POLITICAL AND LEGAL INSTITUTIONS

by the king. The sabhā, a more select body, was less popular and powers of sabhā and samiti cannot be exactly defined, numerous passages referring to them clearly indicate that both these Assembles exercised considerable authority and must have acted as healthy checks on the power of the king. Great importance was attached, not only to concord between the king and the Assembly, but also to a spirit of harmony among the members of the Assembly. The last hymn of the Rigueda invokes such unity in solemn and beautiful language:

"Assemble, speak together; let your minds be all of one accord"

"The place is common, common the assembly, common the mind, so be their thoughts united."

"One and the same be your resolve, and be your minds of one accord

"United be the thoughts of all that may happily agree."

The royal authority was also materially curbed by the power and prestige of the Purohita, who accompanied the king to battle [0. 348] and helped him with prayers and spells, and the influence of the priesthood generally, to which the Dānastutis bear indirect testimony. The cases of Vasishtha and Viśvāmitra are noteworthy in this connection. Special reference may also be made to the following verses (RV, IV. 50, 7-9):

- (7) That king, indeed, overpowers all opposing forces with his valour and might who maintains Brihaspati (the Brahmana priest) well attended, and praises and honours him as (a detty) deserving the first share (of the homage due);
- (8) He (that king) verily abides, well established in his own place; to him, the holy food flows for ever; to him the visat, bow down of their own accord, the king with whom the Brähmana takes precedence.
- (9) Irresistible, he wins the riches of his enemies and his kinsmen; the king who affords protection to the Brähmana desiring help—him the gods help.

There is hardly any material difference between the power of the Brāhmana (Brihaspati) over the king as described in this passage and the power of the Purohita over a king, which is associated in our minds with the later stages of political history when the caste system was fully developed.

The immigrant Aryans had necessarily to carry on bitter and prolonged fights with the indigenous people called the Dāsas or Dasyus. But there was no attempt at the extermination of the conquered foes. The process of amalgamation of the invaders with the conquered abortisms took the form of intermarriage and

the absorption of the latter into the fourth (and occasionally into the time) $var\phi a$ or social class. The translation of the word dāsa by "siave" has led to the misconception that the conquered aborigines, both male and female, "were enslaved." Dāsa does mean a "inie-iong servant," but the horrors associated with the term "slavery" are not to be thought of in this connection. Similarly the so-called female slaves (uasis), captured or received as gifts by kings, were lite-long servants assigned generally to the harems of kings in later times. There is, however, no recorded instances in the kV or later literature of the harsh or cruel treatment of a dāsa or dāsī, which is generally associated with slavery.

The protection of the people was the sacred duty of the king. In return he expected and received loyal obedience from his subjects. The word bali occurs several times in the RV in the sense of a tribute or offering to a god (I. 70. 9; V. 1. 10, etc). In the sense of a tribute to the king it is met with in the compound balihrst, "paying tribute" (VII. 6. 5; X. 173. 6). The tributes were probably received in kind from the subjects. Whether these were voluntary or involuntary, and thus amounted to a kind of indirect taxation, is a debatable point. The truth seems to be that the tribesmen who were led to victory and safety by their ruler voluntarily showered presents on their leader; and that these became more or less regular and periodical in times of peace and to that extent less voluntary. There seems to be little doubt, however, that the hostile tribes defeated in battle were forced to pay some kind of bali or tribute to the victor. There thus seems to be in existence taxation, both of the voluntary and involuntary type, in the days of the Rigveda. If in a simile in RV, I. 65 4 the king is described as "devouring the people," it is not to be understood in the sense of "oppression of the people" but rather his "living on them." The king was not the owner of the land. Even when the Dānastutis speak of generous gifts by the kings to the priests, they are normally articles of personal property rather than land.

The king was pre-eminently the war-lord and RV gives us some idea of the mode of warfare. The king and his nobles (the rajanya or Kshatriya class) fought from charlots, and the common people on foot. The knowledge of battle arrays of different types may be inferred from the use of certain terms such as sardha, vrāta, gava, etc. which probably denoted different military units. As in later days, we hear of martial music and banners in connection with battle. The principal weapon was the bow and arrow. The arrows were tipped with points of metal or poisoned horn. Other weapons were lances, spears, axes, swords, and sling-stones. The use of (leather?) guards to save the hands and arms from the friction of the bow-string, as also a coat-of-mail and helmet, characterized the equipment of a warrior. Horse-riding was known. It

POLITICAL AND LEGAL INSTITUTIONS

is difficult to agree with the scholars who hold that no mention is made of the use of cavalry in war. As to the actual mode of warfare, all we can infer from passages like RV, II, 12, 8 is that a body of foot-soldiers marched along with the charioteers, the two together constituting the army. If Sayana's interpretation of X. 142. 4 is accepted, then besides ordinary wars of defence and conquest, raids into neighbouring territory were frequent and normal for winning booty which the king shared with the people. Ramparts or forts (pur), which were either of stone or metal (augst pur), and sometimes consisted of an enclosure protected by a palisade consisting only of a hedge of thorn or a row of stakes, were used as places of refuge against attack in times of war. The method of laying siege in RV days was probably by setting fire to the surrounding palisades or walls (VII. 5. 3). But mention is also made of pur charishnu (lst. moving fort) which may be a sort of engine for assaulting strongholds. Reference has been made above pp. 348) to hymns breathing a martial spirit.

2. ADMINISTRATIVE ORGANIZATION

The "Five Peoples" (pañcha janāh) was perhaps a comprehenterm for the Vedic Aryans (ante, p. 251). These five peoples were split up into numerous tribes, the tribe being the political unit (as mentioned above). The Viś (a term the various senses' of which have puzzled many scholars) played a vital part in the political organization.

In a political sense, the members of a tribal unit were the vision constituting the rāshtra (or tribal kingdom). Below the viš came the grāma or village, which was the basic administrative unit. Reference is also sometimes made to jana, another unit whose precise nature is not known.⁸ The administrative organization was essentially rural in conception. The grāma was practically self-contained, and had for purposes of defence a fortified enclosure (pur) on an eminence. These enclosures, as mentioned above, were made of stone (sometimes probably also of iron) and had many walls Towns with wooden walls or palisades and ditches all round were undoubtedly known, but played practically no part in the economic life of the people. They figured only in the defensive warfare of the Vedic Aryans and were occupied (it seems) during emergencies by the warrior-class.

The grāma was probably made up of little knots of houses of the several branches of one family (Kula). The part played by the Kula in the administrative organization is perhaps indicated by the description (X. 179. 2-3) of a Kulapā (guardian of the family), forming the entourage of a $vr\bar{a}papati$ (probably the same as the pramara) and fighting under his banner. The pramara exercised, it seems, both civil and military functions. The $Sen\bar{a}n$, whose

military authority in times of war is undeniable, probably discharged civil functions in times of peace, ranking higher than the grāmaṇī. In the description of the Dāśarājān fight (VII. 18. 11) Sudās is said to have overthrown "the twenty-one tribes (jaṇān) of the kings or folk of the two Vaikarṇas." It is probable that they were a joint people, the Kuru-Krivis. It is doubtful, however, whether this aggregate of twenty-one janas represented a political and administrative organization higher than a jana.

Of the various functionaries of the king, the most important appear to be the Purohita and the Senāni referred to above. The king probably appointed a large number of priests to perform the sacrifices and other sacred rites. There are also references to spies (spaša) who were apparently engaged by him, as in later days, to secure information about the kingdom and the people. We also hear of dūtas or messengers who were undoubtedly the principal means of communication between the different states. The king had no doubt other officers, but we have no detailed knowledge of them

3. LAW AND LEGAL INSTITUTIONS

The regular word for law or custom in the RV (I. 22 18; 164. 43, 50; III. 3 1; 17. 1; 60. 6; V. 26. 6; 63. 7; 72. 2, etc.) is Dharman, but there are very few data as regards the administration of justice or the code of law followed. We can only infer from later practice that the king administered justice with the assistance of legal advisers including the Purohita.

Theft, burglary, highway robbery, and cheating (chiefly at gambling) are among the crimes recorded, cattle-lifting at night being a very frequent one Marriage of brother and sister was looked upon as incest. Tying the criminal to a stake was a common form of punishment. The epithet satadaya, i e. "one, the price of whose blood was one hundred (coms)" shows that the system of wergeld (Vairadeya) or blood-money was probably in force. Whereas death was one of the punishments for theft in later times, it was not so in the Rigvedic age. The aim seems rather to have been the satisfaction of the person wronged.

Geldner^o suggests that a heated paraku (axe) used as an ordeal is referred to in RV, III 53. 22, and Ludwig¹⁰ thinks that RV, I. 158. 4 ff., refer to Dirghatamas having been subjected to the fire and water ordeals. These are quite plausible suggestions, though no definite conclusions are possible.

Rina (debt) is frequently mentioned in the RV though in a metanhorical sense in the majority of passages where it occurs. Indebtedness seems to be a fairly well-known condition. There was a special term rinam sam-ni for paying off a debt. The loan (rina) thus was the only contract known and that, chiefly, at gambling. A

POLITICAL AND LEGAL INSTITUTIONS

debtor was punished with a period of servitude to the creditor and was bound by the creditor to a post (dru-pada) to bring pressure on him for payment. Some kind of reference to a rate of interest or instalment of principal may be traced in one passage, but this is not certain. The interest was presumably paid in kind. The hymn disapproves of the practice. right of a father to adopt is clearly recognized, though a Vasishtha

The land was probably owned by individuals and families, and the proprietorship was vested in the father, as head of the family, It is not certain whether the sons had any share in the land of the family during their father's lifetime. If there were several sons,

they could easily secure new allotments, if necessary, because as fresh land could be easily obtained, the problem was not, in any

sense, an acute one

The individual ownership of land is, however, a debatable point. The RV supplies the following data. A piece of ploughland is indicated in the RV by the words urvarā and kshetra (I. 127. 6; IV. 41. 6; V. 33 4; VI 25 4; X. 30 3; 142. 3, etc). A passage (I 110. shows that fields were carefully measured from which it follows that individual ownership in land for cultivation was recognized. The same conclusion follows from VIII. 91, 5 in which Apala refers to her father's field urvarā as a personal possession This conclusion agrees well with the use of epithets like urvarā-sā, urvarā-jit. kshetrāsā "winning fields," and the mention of fields in the same context as children (IV. 41. 6)

Nothing definite can be averred as to whether a grown-up son continued to stay with his father, his wife becoming a member of the father's household, or whether he established a house of his Variations in local custom probably explain discrepant statements in this connection Similarly, we do not know whether the son was granted a special plot of land after marriage, or whether he acquired it only after his father's death But we must not form an exaggerated estimate of the control of the father over a son, no longer a minor, because RV. I. 70. 10 suggests that the sons might divide their father's property in his old age, and X 85. 46 gives a hint that the aged father-in-law passed under the control of his son's wife. The suggestion that separate holdings existed as early as the Rigyedic days is confirmed by the name of the deity kshetrasya pati (Lord of the Field) to be understood as the god presiding over each field

This view has been put forward by Dr H. C. Raychaudhuri, Advanced History of India (Macmillan & Co.Y. p. 29.
 Advanced History of India, p. 29.
 Advanced History of India, p. 29.
 Ved. Stud., II, 363.
 Tyranslation of the Rigorde, III, pp. 253-6

^{6.} CHI, I, p. 85.

- 7. (1) In a geographical sense, the term means "settlement or colonies," and a group of these settlements or colonies probably made up the jense (people) (cf. the next footnoie. (2) Pollicially the videly were the subjects who constituted the rishtra and who, foregathering in a formal assembly, could in an emergency unseat an incapable ruler or set the seal of approval on the coronation of a worthy one. (3) In a socio-religious sense, the videly represented the third class of Aryan society engaged in agriculture and commerce. (4) No wonder that in some passages, it should have the fourth or general sense of popular.
- 8 Sometimes Vis. 2010a and even grama are used almost synonymously, But grams was normally a smaller unit than the vis or jana The relation between these two is not quite clear. Dr. H. C. Raychaudnur observes as follows: "In some Veduc passages there is a clear contrast between the two, and Iranian some Veduc passages there is a clear contrast between the two, and Irānian analogies seem to suggest that the Vis is a sub-division of a jean, if tre latter may be taken as a parallel to the Irānian Zentu. It is also to be noted that the Bhārstas are referred to as a single Jana, but when the word Vis is used in reference to them, we have the plural Visah possibly pointing to the existence of plurality of such units" (Advanced History, p. 29).

 9. Ved Stad, Il, 130.

 10. Translation of the Ragueda, IV, 44

CHAPTER XVIII

RELIGION AND PHILOSOPHY

As has already been indicated above (Ch. XII), the different parts of the Rigveda-Samhita were composed at different times, and it should be regarded, not as a single text by one author, but rather as a whole literature accumulating for centuries, a library, as it were, in the making for years. Nay, although the hymns of the Riggeda represent, in the main, the product of that period of intellectual activity when the Aryans found their way into India from their original home, it is not beyond the realm of probability that some of them were composed, or at least existed in the minds of the Aryan poets, even before they entered India. It is thus possible that a few stanzas or even hymns are reminiscent of the meteorological and astronomical conditions that obtained thousands of years ago, somewhere outside India. No wonder then, that we should find in the Rigveda thoughts, beliefs, and practices that one would associate with the most primitive grades of society and with an unsophisticated age, side by side with an elaborate sacrificial technique and advanced metaphysical speculation indicating the deepest apprehension of the godhead and its relation to man. The view, therefore, that the state of religious belief in the RV is a product of priestly effort and amounts to wholesale syncretism is as wrong as the one that it presents us with nothing else but a naïve outpouring of the primitive religious consciousness.

I. MYTHOLOGY

Origin

Let us therefore draw up a clear picture of the religious conceptions and philosophical thoughts revealed in poetic garb in the RV. In the order of their evolution, as far as possible, before attempting to label, define or classify them. The RV poets were deeply affected by the apparently mysterious working of the awe-inspiring forces of nature. Their hymns reflect in places that primitive attitude of mind which looks upon all nature as a living presence, or an aggregate of animated entities. The luminaries who follow a fixed course across the sky are the devas (lift., the shining ones) or gods. Naturally the sense of the dependence of human welfare on the powers of nature, the unexplained mysteries of whose working invests them with almost a "supernatural" or divine character, finds its expression in various forms of worship:

At the same time, the attempt of the human mind, more poetic than scientific, to account for the various forces and phenomena of

nature with which man is confronted, leads to the rise of myths. When the imagination interprets a natural event as the action of a personified being resembling a human agent, a myth is born. The creative fancy of the Rigvedic poets goes on adding new touches to the picture, so that a natural phenomenon ultimately appears as a drama of human passions and not as an unintelligible and chaotic happening. The stage of anthropomorphism is thus reach-Although Rigyedic mythology is not as primitive as some scholars once believed it to be, in no other literary monument of the world do we come across this primitive phase of the evolution of religious beliefs which reveals to us the very process of personification by which natural phenomena developed into gods. The myths that have grown up around a deity are in many cases transparent enough to keep the physical basis almost in full view all the time. The name of the god often hides but little. Nevertheless, in cases where such a clear view of the original nature of a god is not possible, the etymological equations of comparative mythology have not proved to be the reliable guides that they were once supposed to be.

The closely allied mythology of the Irānians is illuminating at times, but mythological affinities are not as numerous as one would be led to expect from the striking linguistic affinity of the oldest form of the Avesta with the Rigvedic dialect in vocabulary, metre, syntax, diction, and general poetic spirit, the reason being the considerable overhauling of mythological conceptions in Irān by the religious reform of Zarathustra (ante, p. 226). The Rigveda is a monument of Indo-European mythology and, in this respect, is equalled in importance only by Greek mythology. The Rigveda mythology thus forms a connecting link between the later Indian phase of religious beliefs and the Indo-Irānian as well as the earliest Indo-European phase.

We now turn to the lines of mythological evolution within the Ripreda. In the hymns to the Dawn, the Sun and the Fire, among others, we are face to face with the corresponding physical phenomena exercising directly their beneficent powers. The process of personification next makes gradual progress, and the personified phenomenon is delified, and thus emerge the concrete figures of Ushas, Sürya, and Agni with whom the poet holds, as it were, direct communion. We are not so fortunate in the case of the greatest figures of the Rigvedic pantheon, namely Varuna and Indra, regarding whose physical basis no certain conclusions have yet been arrived at. But in the case of a large number of Rigvedic gods, we are able to trace the original forces or events in Nature. Where the personification does not dominate the conception, the name of the deity is identical with that of the natural phenomenon, as in the case of Ushas Surya. Where the names differ, the

personification has evidently advanced to the stage of anthropomorphism and apotheosis. The number of gods is now on the increase, the increase being due either to some striking attribute abstracted from the concrete personality of a deity and founding the conception of a new deity which develops independently, as in the case of Savitti, or to an abstraction (like Viśwakarman) taking up a concrete form later through association with some cosmic function or natural power.

2 The Nature and Classification of Gods

Although the divine rank thus got swollen, there is no fixed order of seniority among the gods, as in a pantheon, in the strict sense of the term. For too many functions, powers, and offices are held in common by two or more deities. There is a sort of communism or democracy among them, though it is not thoroughgoing or consistent, and for this "the belief in individual gods alternately regarded as the highest" (i.e. Henotheism or Kathenotheism as Max Müller has named it) is responsible. The particular deity that the poet happens to be invoking monopolizes, for the time being, all the attributes. The god is addressed for the moment as if he were the greatest and even the only god. Almost in the same breath, however, (in the very next stanza or hymn) this might yod is described as deependent on others.

In fact, the joint exercise of various powers, functions, and notable deeds by two or more or all the gods is almost a favourite theme in the Rigveda hymnology. In a thoroughly impartial spirit. the mutual co-operation, interdependence, and subordination of the various deities in pairs or larger groups is often described. There is hardly a god in the Riggeda so insignificant as not to receive homage from others not excluding the highest. "Henotheism," in the strict sense of the term, is not to be thought of because the divine host of the Rigveda is not a pantheon (technically speaking) with an acknowledged overlord. Various explanations have been offered to account for this apparently inconsistent evaluation of divine ranks and dignities in the Rigneda It has been urged, for example, that the inconsistency may be due to the partiality of a particular Rishi or Vedic Sākhā to a particular god. But the force of this argument is considerably weakened by the large number or Rigyedic repetitions and (on the whole) their even distribution throughout the text. As Bloomfield observes, "no theory as to the character and origin of the Rigveda can pass by these facts. They mark the entire mantra-literature as in a sense epigonal and they forbid pungent theories about profound differences between the family books, their authors, and their geographical provenance."1

It has also been contended, as Macdonell'a points out, that "in the frequent hymns addressed to the Visvedevas or All-gods, all

the deities, even the lesser ones, are praised in succession, and that as the great mass of the Vedic hymns was composed for the ritual of the Soma-offering, which included the worship of almost the entire pantheon, the technical priest could not but know the exact relative position of each god in that ritual." This explanation rests on the unwarranted assumption that the ritualist of a later age, when sacrificial technique was enormously developed, had to, and could, preserve very scrupulously the mythological values of Rigyedic poetry.

Another approach to the problem of introducing order and system into this apparent chaos has been through classification. There is, first of all, the traditional classification hinted at in RV. I 139 11 and followed by Yāska, giving us a triple division of the Vedic gods corresponding to the three orders, namely, terrestrial (prithivisthana), aerial or intermediate (antarikshasthana or madhyamasthāna) and celestial (dyusthāna). Prithivī, Agni, Soma, Brihaspati, and the rivers belong to the first order; Indra, Apāmnapāt, Rudra, Vāyu-Vāta, Parjanya, Apah, and Mātarisyan to the second; and Dyaus, Varuna, Mitra, Sūrva, Savitri, Pūshan, Vishnu, the Adityas. Ushas, and the Asvins to the third. This classification is founded on the natural basis which the deities represent, and is thus the most practical and least open to objection (comparatively speaking). RV, X 158 1, which invokes Surya, Vata, and Agni for protection from heaven, air, and earth respectively is apparently the lead followed by the predecessors of Yaska whose views are quoted in the Nirukta, and who hold that there are only three representative deities, Sūrya ın heaven, Vayu or Indra in air and Agni on earth, each of these having various appellations according to differences of function.

The division is overlapping and not very clear-cut, as Tvashtri and Prithivi are assigned to all the three spheres, Agni and Ushas to the terrestrial as well as the aerial spheres, and Varuna, Yama and Savitri to the aerial as well as the celestial ones. Another and a less satisfactory division is the historical one, into Indo-European, Indo-Iranian, and Indian deities, based on the age of the mythological creation But the data as regards the dates and periods of many gods is insufficient and the available accounts of Germanic, Slavonic, and Celtic mythologies are defective A division into prehistoric, transparent, translucent, opaque, and abstract or symbolic gods, based on the stages of personification which the deities represent, introduces the subjective element, owing to want of finality regarding etymologies and interpretations, and involves difficulties as regards clear lines of demarcation. A classification according to relative greatness may derive support from RV, I. 27. But the difficulties of determining relative greatness are almost insuperable (VIII. 30 I contradicting I. 27, 13) and only a few

tentative conclusions are possible. For example, Indra, the mighty warrior, and Varuna, the supreme moral ruler, stand out preeminent above the rest. Agni and Soma—the two ritual deities—
should come next, but Indra, Agni, and Soma are the three most
popular deities judging by the frequency of the hymns addressed
to them. The statistical standard provided by the number of hymns
dedicated to the gods and the frequency of the mention of their
names is also not a sure guide.

Before we sum up the general features of Rigvedic religion, we shall pass under review the class-characteristics of the gods of the Rigvedic pantheon, and the individual characteristics of the more important among them. The gods are usually stated to be thirty-three in number, divided into three groups corresponding to the three divisions of the Universe as mentioned above. The gods are described as born, though not all simultaneously, and yet they are immortal. This immortality is either taken for granted or is a gift from Agni and Savitri, or is the result of the drinking of the Soma. In appearance they are human, the parts of their bodies (such as their arms or tongue) being identified poetically with the phenomena of nature, such as rays or flames. They travel through the air in cars drawn generally by steeds and occasionally by other animals. The food of men, such as milk, grain, and flesh, becomes the food of the gods when offered in the sacrifice, and is partaken of by them either on the grass kept ready for their reception at the place of the sacrifice or in the heaven where the god of fire carries it to them. The exhilarating juice of the Soma plant constituted the favourite drink of the gods On the whole, the gods are benevolent, the only one with malevolent traits being Rudra. Splendour, strength, knowledge, possession, and truth are their common attributes. As a matter of fact, they have so few individual or distinctive traits, that a riddle hymn like VIII 29 is possible, wherein each stanza describes a deity by its characteristic marks, leaving its name to be guessed. The identification of one deity with another and the invocation of deities in twos, threes, or even in whole groups has helped to add to this vagueness of outline. The gods subdue the forces of evil and regulate the order of nature, which they themselves follow and enforce on mortals They reward the righteous and punish the sinful.

3. The Celestial Gods

We now turn to the individual deities and give a brief survey of their noteworthy characteristics in the order of the spheres to which they belong. The oldest among the gods of heaven, going back to the Indo-European period, and identical with the Greek Zeus, is Dyaus, a personification of the sky, a personification which, however, did not advance beyond the idea of paternity. He is call-

ed a ruddy bull bellowing downwards, a poetic description, probably, of the colour of lightning, the fertilizing power of rain and the thunder of heaven. The image of the beautiful star-studded sky of the night is obviously called up when Dyaus is once compared with a black steed bedecked with pearls. Dyaus is generally paired with Prithivī, the earth, in the compound Dyāvāprithivī, the Universal Parents, who are celebrated in six hymns.

The comparatively small number of hymns addressed to Varuna hardly does justice to his importance in the RV. The personification has so far advanced that his physical basis remains obscure. It has been suggested that the word varuna-s is probably the same as the Greek word Ouranos (sky) though phonetic difficulties make the identification uncertain. Varuna is the upholder of the physical and moral order symbolized in rita with which he is more intimately connected than any other god. The Varuna hymns which are predominantly ethical and devout in tone give us the most exalted poetry in the Rigveda.2 He is a king and a universal monarch having a golden abode in heaven which is lofty and firm, and has a thousand columns and doors. He wears glistening garments. He has spies whom none can deceive. He is predominantly called the Asura, who rules by means of his maya which means "occult power" (applicable in a good sense to gods, and in a bad sense to demons). By this power he sends forth dawns and makes the sun (who is also described as his eye) traverse the sky He supports heaven, earth, and air He, with Mitra, is most frequently invoked as a bestower of rain. He regulates the seasons Neither god nor mortal may violate his ordinances Varuna's special connection with the waters is unmistakable. He is a regulator of the waters and causes the rivers to flow. If the ocean does not overflow, although the rivers constantly pour into it, it is due to the māuā of Varuna He is above all the dhritavrata, the upholder of ordinances such as the fixed paths of the luminaries across the sky. He stands out pre-eminently as the moral governor among all the deities The fetters (pāśas) with which he binds sinners are characteristic of him in this capacity. In every hymn to Varuna, there is a prayer for forgiveness of sin

There is uncertainty recarding the physical basis of the idea of Varuna. The view generally held is that it is the encompassing sky This original conception, it is supposed, goes back at least to the Indo-Irânian period since Ahura Mazdāh (the wise spirit) of the Avesta agrees with the Asura Varuna in character, though not in name. In the opinion of the present writer, Varuna in the RV is pre-eminently the All-Pervader, the All-Encompasser, the All-Fenveloner—an aspect fully agreeing with his name which appears to be derived from the root wi ("to cover" or "encompass"). This All-Encompassing character is in keeping with his lordship over the

twin spheres of light and darkness, of Night as well as Day, and with his position as supreme ruler (samrāj) of the physical and moral world and as the custodian of rita. This rita, which like a wheel circumscribes the universe, regulates it, and keeps it in place, is Varuna's pās and has for its physical basis the belt of the zodiac from which no luminary (deva) may deviate and the penalty for darkness and death. This is one side of the All-Encompassing character of Varuna. Another and a more important side (unfortunately missed by most scholars) is Varuna's overlordship of the Waters (āpaḥ) which are far more intimately connected with him in the Rigueda than is generally supposed. The researches of Warren's and of Tilak' establishing the cosmic character of these Waters have not received the attention they deserve They may be summed up as follows:

(1) The Waters are both terrestrial and celestial. The attributes of the latter in the Rigveda cannot all be satisfactorily accounted for on the hypothesis that they are rain-waters. (2) The release of the Waters and the breaking forth of the dawn or the emergence of light are described as simultaneous events (I. 164, 51) (3) In fact, the movement of the Waters and the spreading forth of the rays of light originate from the same source and follow the same path (of rita) simultaneously. (4) These Waters are described as moved upwards by Indra when set free for movement, simultaneously with the luminaries, after the killing of Vritra (II. 15. 6; I. 80 5; I. 32. 12, etc.). Their downward movement is. of course. described, as in VIII, 69, 11 where the seven rivers are said to flow into the jaws of Varuna as into a surging abyss or ocean. (5) The Universe is said to have consisted of nothing but undifferentiated Waters in the beginning (X. 82. 6; 129. 3). These Waters are coeval with the universe (X. 30, 10). (6) The cosmic circulation of the celestial waters and the simultaneity of the free flow of the Waters and the rising of the Dawn are stated unambiguously in the Avesta (Vendidad XXI. 4-5; Yasht VI 2, 3; etc.). (7) This theory of the cosmic circulation of the Waters is not peculiar only to Indo-Iranian mythology, but is found in Greek and Egyptian mythologies also. In other words, the celestial waters or watery vapours which pervaded the regions above, below, and around the earth were supposed by the Rigvedic poets to be the stuff out of which the universe was created.5 and were, like the ether of modern scientists, the medium of the transmission of the light of the luminaries.

A completely satisfactory explanation of the Rigredic account of Varupa as the All-Pervader follows from his rulership of these Cosmic Waters. If Varupa in later mythology sank to the position of an Indian Neptune, it was among other causes also due to the original sense of the Apah (Waters) as "Cosmic Waters" in the Riveda being lost sight of.

Mitra is so closely associated with Varuna, that only one hymn (III. 59) is addressed to him alone separately and his individual character cannot be definitely established. His distinctly peculiar epithet is Yātayaj- jana, the "besturrer of the people," because he marshals people into activity as the great Aditya. Mithra is a sungod, the guardian of faithfulness, in the Avesta, and Rigwedic evidence points to Mitra as a solar deity in the aspect of a benevolent power of nature as suggested by the name Mitra which originally meant "an ally."

Sūrya is the most concrete of the Solar deities, the name (which character as a luminary was always present to the mind of the poets. As the all-seeing god, he is often called the eye of Mitra, Varuņa, Agni, and other gods. The dawns produce Sūrya and he is to be the son of the goddess Aditi and of Dyaus. He is a ruddy bird or eagle that flies through space. He is cognate with the Avestic hvare, "sun," who has swift horses and who is the eye of Ahura Mazdo.

Savitri is pre-eminently a golden deity. His eyes, arms, hands, and tongue are golden; so are his car and its pole. He diffuses golden splendour. He removes evil dreams and drives away demons and sorcerers. In the famous Gäyatri stanza (III. 62. 10), which has remained the sacred morning prayer of the Hindus for more than two thousand years, he is invoked to confer his splendour on, and stimulate the thoughts of, the worshipper. When Savitri is said to shine with the rays of the sun, to urge the sun or to announce men as sinless to the sun, he is evidently distinguished from Sūrya, as in RV, VII. 63. But there is a large number of passages where it is difficult to distinguish between the two. The poets love to play on the name of the god, derived as it is from sū, to stimulate. It is to be noted that he is connected with evening as well as with the morning time.

Pūshan is a god with a very vague personality, the anthropomorphic details being very few. He has a beard and braided hair. His chariot is drawn by goats and he carries a golden spear, an awl, and a goad. His favourite food is Karambha ("gruel"). He is connected with marriage in the wedding hymn (X. 85). He acts as the envoy of Sūrya with his golden aerial ships, and as a charioteer drives downward the golden wheel of the sun. He is a guardian of the roads, the deliverer, por excellence, from danger, and takes care of cattle. Aphripi ("shining") is an exclusive epithet of his Very probably, he was originally a solar deity standing for the beeneficent power of the sun manifested chiefly in its pastoral aspect.

The only prominent anthropomorphic trait, nay, the main cha-

racteristic of the nature of Vishnu—a minor deity in the RV—is his three steps which give him the exclusive epithets uru-gāya ("wide-going") and uru-krama ("wide-stepping"). Two of his steps are visible, but the third or highest is invisible, far beyond the flight of birds, and is like an eye fixed in heaven, shining brightly down. Since he is described as setting in motion, like a revolving wheel, his ninety steeds (days) with their four names (seasons, an evident allusion to the three hundred and sixty days of the solar year), Vishnu probably is a personification of the activity of the sun, whose passage through the three divisions of the universe, namely, earth, air, and heaven, is referred to in his three steps. Indra is the only dety most closely associated with him.

The word aditi is primarily a noun meaning "non-binding," "bondlessness," from diti "binding," derived from the root da "to bind." Hence as a goddess, Aditi is naturally invoked to release her worshipper from bondage. This original meaning of unpersonified "freedom" seems to survive in a few passages of the RV. Now the Adıtyas are several times described as aditeh putrāh ("sons of Aditi"), and this expression may have meant in the pre-Vedic age simply "sons of freedom" (like sahasah putrāh="sons of strength") and probably described a prominent quality of Varuna and the other Adityas. Macdonelle wonders, "But how are we to account for so early a personification of such an abstract idea, and in particular for Adıtı becoming the mother of the Adityas?" The explanation probably is as follows: Aditi is also unmistakably connected with light in the RV. Varuna-the Aditya-is connected prominently and almost exclusively with rita; so is Aditi. This rita has for its physical basis the belt of the Zodiac (as mentioned above). Now the devas. the lights of heaven, seemed to the ancients to recover their freedom from the clutches of darkness and to restart on their bright career from a fixed point in the east, lying on the belt of the Zodiac or the Rita. This point in all probability was Aditi. No wonder, the luminaries suddenly emerging thus into freedom and light (emerging in other words into life itself) from this fixed point (Aditi) received the epithet "sons of Aditi." Diti was the exactly opposite point on the path of the Zodiac in the west, where the lights went out. It will not be necessary on this theory to suppose? that the name of Diti as a goddess was merely an anthithesis to that of Aditi, formed from the latter to express a positive sense, as sura, "god." was later (by false etymology) evolved from asura "demon." It is to be noted in this connection that none of the wind or storm gods are called Adityas. The latter are all gods of light. Six Adityas are enumerated once (II. 27. 1), the number being stated as seven and even eight in the last books of the RV. Among the Adityas, Varuna, Mitra, and Aryaman are Indo-Irānian in origin, while Bhaga, Daksha, and Améa seem to be deified abstractions. The sun is probably the

seventh Adıtya, and Mārtanda the eighth, whom Adıti casts off and brings back (X 72. 8, 9), is very likely the setting sun.

In the case of Ushas, the goddess of Dawn, the personification is slight, the poet never losing sight of the beautiful physical phenomena behind the deity. Gaily attired like a dancer with a garment of light, she rises in the east and exhibits her graces. She is everyoutiful, being born again and again, though ancient. Her association with the sun is naturally very close. He is her lover, but as she precedes him, she is also said to be his mother. She is the siter of the might. She is also associated with Agni. As already noted above (p. 346) the Dawn-hymns are among the most poetic of the RV.

From the point of view of the number of hymns addressed to them and also otherwise, the twin deities, known as the Asvins, are the most important after Indra, Agni, and Soma. They are matutinal deities, their connection with light being well established. Except in two or three passages, they are assumed everywhere as inseparable. Their paths are said to be golden. Dasrā (wondrous) and nāsatyā are their most peculiar and frequent epithets. They are particularly associated with honey (madhu), which they desire, drink, carry on their car, and dispense to the bees and mortals. They are also fond of Soma. Their golden car, fashioned by the Ribhus, is sometimes drawn by one or more buffaloes or by a single ass (rāsabha). Their sister is probably the Dawn. They are associated with Surva who is either the sun conceived as a female or the daughter of Sūrya. They are the two husbands of Sūryā whom they carry in their car. They are above all succouring divinities, the deliverers and rescuers, par excellence, from distress. They are divine physicians with several legends of miraculous cures to their credit.

Ther physical basis has been a puzzle from the days of Yaska till to-day. The Aśvins probably date from the Indo-European period, in character if not in name. Some think that they represent the morning twilight—half-light and half-dark. The Aśvins, who are sons of Dyaus (dro napāŭe Lettic ēdwa deli = Lithuanian dēwo sunelei), who ride through the sky with their steeds, and have a sister, greatly resemble the two Lettic God's sons, who come riding on their steeds to woo the daughter of the sun, either for themselves or for the moon, and the Twin Horsemen of Greek mythology, sirjanya duhitā, corresponds to the Lettic saules meita. The succouring activity of the Aśvins finds a parallel in the feats of the Lettic God's sons as well as in those of the Greek Dioskouroi, particularly in their character as rescuers from the ocean, delivering the daughter of the sun or the sun himself. Another plausible theory is that which considers the Aśvins as the morning and even-

ing stars. The astronomical fact that the latter are not two but one is no serious objection, as the identity of the two stars was recognized long after the physical basis of the Asvins was forgotten. The invariable separation of the two stars, whereas the Asvins appear both together in the morning, is an objection that can be explained. if we remember that the Aśvins are spoken of separately in a passage or two, and that the Asvins are invoked sometimes in the morning and evening, though sunset plays but little part in Vedic worship. Weber's opinion⁸ that the Asvins represent the two bright stars Castor and Pollux constituting the twin constellation of the Gemini receives striking support from the theories of Tilak advanced in his Orion and The Arctic Home in the Vedas If, as Tilak says,9 the sacrifice or the year once commenced with Aditi at the vernal equinox in or near Punarvasu, i.e. in the twin constellation of the Gemini, and if we are to assume that there are reminiscences in the Rigueda of the year-long day and night of the Arctic regions, then the twin Stars, Castor and Pollux, represented by the Asvins, would herald the Arctic Dawn appearing after the long Arctic night or at the beginning of the year. But as the Arctic theory is far from being accepted by scholars, the morning and evening star theory remains the most plausible theory advanced so far

4 The Atmospheric Gods

Indra, the favourite national god of the Riggeda, has the largest number of hymns, nearly 250, i.e. about one-fourth of the total number or hymns in the RV, addressed to him. 9a He has more myths woven around him and a more developed anthropomorphism on the physical side than any other god. He is not a purely Indian creation and his name is pre-Indian (a demon in the Avesta) 97 The cosmic aspect of his nature as the liberator of the Waters is older than the martial one, which seems to have developed to the detriment of the former aspect. His physical proportions and powers are stupendous, almost cosmic. His arms bear the Vajra, his exclusive weapon, though he also carries a hook and wields the bow and arrow. He is a car-warrior (Ratheshtha), whose golden car is drawn by two steeds. He is more addicted to Soma, which stimulates him to battle, than any other god, the epithet somapā "Somadrinker," being characteristic of him. His father is Dyaus according to some passages, Tvashtri according to others. Agni is his twin brother, most often conjoined with him as a dual divinity. The Maruts are his principal and constant allies, the epithet marutvant being neculiar to him. The essential myth, forming the basis of his nature and repeated frequently and with variations, is the Vritra myth. Accompanied by the Maruts and exhilarated by Soma, he attacks Vritra, often called the Ahi (serpent). He smashes Vritra

who encompasses the Waters, and so deserves the exclusive epithet apeu-jit "conquering in the Waters." In this struggle, which is constantly renewed, he also pierces the mountains and releases the pent-up waters, like imprisoned cows. The demons, whom Indra throws down, dwell on the parvata or giri (mountain or cloud,) and an adri (rock) is said to encompass the Waters. The clouds containing the Waters are figured as fortresses (pura) of the aerial demons, described either as autumnal or as made of iron or stone, and as 90, 99 or 100 in number. He is, therefore, characteristically called the fort-destroyer (pūrbhid) but his exclusive and chief epithet is "Vritra-slaver" (Vritra-han).

The release of the Waters is simultaneous with the winning of ight, sun, and dawn. Independently of the Vritra fight also, he is said to have found the light, the dawn or the sun, and made a path for the latter. The cows mentioned with the sun and dawn must be understood to be the morning beams. The gaining of Soma alaos associated with the winning of the cows and the sun and with the Vritra fight. His connection with the thunderstorm is indicated when he is said to have created the lightnings of heaven and directed the flow of the Waters downwards.

The cosmic actions usually attributed to all the gods are attributed to him also. His particular achievement is that he settled the quaking mountains and plains.

As the destroyer of demons he is naturally the favourite god of battle invoked more often than any other god by warriors. He protects the "Aryan Colour" and subjects the blackskins—the Dasyus He is so generous to his worshippers that maghavan "bountiful" is almost an exclusive epithet of his.

Besides the Vritra-myth, other minor stories are also related of him, such as "shattering the car of Ushas and stopping the steeds of the sun". Some of the stories have an historical element also, as when he is said to have aided Sudäs.

Indra, with his physical superiority, his excesses in eating and drinking and his cruelty in killing his own father Tvashtri, forms a marked contrast to Varuna, the upholder of moral order.

The true character of Indra can be understood by ascertaining that of Vritra, his opponent. The indigenous commentators and a number of scholars look upon Vritra as the demon of drought, confining the waters within the clouds. A more reasonable view is that 10 he waters within the clouds. A more reasonable view is that 10 he was originally a frost and winter demon from whose grasp the waters have to be wrenched free every year, that thunderstorm and rain are not the only natural basis of the Vritra myth, and that the geographical and climatic environments in the later home of the Vedic Indians only helped so to revise the original myth as to render very plausible the interpretation of the mythological figure of Indra

as the god of the thunderstorm. In support of this view may be stated the following facts:

(1) Thunderstorms or rains are hardly mentioned in the Indra-Vritra myth and the clouds play quite a minor part in it. (2) As the waters released by Indra are described as running like horses in a race, rain-water could not be meant, as it does not flow horizontally nor could races be imagined as run vertically. (3) As the Varra is described as made of ore, it is not certain that it means a thunderbolt. (4) If Indra is the god of the thunderstorm, then the god Parjanya will be a superfluous figure. (5) The parallels in Indo-European mythologies suggest that the description of the Vritra fight originated not in India but in a country where the hideous winter lies on land and water, and that the Vritra myth came with the Arvans from Kashmir or the north-western countries into the Punjab. (6) As the midday libation is specially reserved for Indra and the Maruts, Indra very probably represents mythologically the sun at the zenith. In all probability, therefore, Indra was originally a god of light.

We pass over the minor atmospheric gods like Trita Aptya, Apām Napāt, Mātarıśvan, Ahi Budhnya, and Aja Ekapād, and turn to Rudra who, though a subordinate deity in the RV, is interesting from the point of view of later mythology. He has braided hair and a brown complexion. He wears golden ornaments and a glorious necklace (nishka). He is the father of the Maruts whom he brought forth from the shining udder of Priśni. He is fierce like a terrible beast and is called a bull as well as the ruddy boar of heaven. He is exalted and mightiest of the mighty. He is the lord (Isana) and father of the world. He is easily invoked and auspicious (śwa), but in many passages is looked upon as malevolent. He is implored to save his worshippers from his bolt which destroys cows and men. Dread of his wrath and shafts is frequently expressed. The beneficent side of his character, however, comes out in other passages. His two exclusive epithets jalasha (cooling) and jalāsha-bheshaja (possessing cooling remedies) suggest his healing powers. He is the great physician. The physical basis is not certain. It is suggested that the storm in its destructive aspect may explain the malevolent side of his nature, while the fertilizing and purifying function of the thunderstorm may well be the basis of his healing and beneficent powers (see also pp. 161-2, 207).

The Maruts—the storm-gods—form an important group of deities (gava, śardhas), numbering thrice sixty or thrice seven. They are the sons of Rudra and Priéni, the cow (representing the mottled storm cloud?), also of Vāyu, and are sometimes described as self-born. They are all brothers of equal age, having the same birth-place and abode. They are golden, ruddy, and self-luminous and are associated with vidyut, particularly having the epithet lightning-

spread (rishi-mdyut); the cars on which they ride gleam with hightning. Among their personal decorations, such as helmets, mantles, garlands etc., armlets and anklets are peculiar. They make a loud noise, represented by thunder and the roaring of the winds, and as such are pre-eminently the singers of heaven, their songs inspiring Indra. Their chief function is to shed rain which is figuratively called either milk, honey, or ghi, and which is connected with the thunderstorm. At the same time they produce light and make a path for the sun. They are the constant allies of Indra, in whose company they are addressed as "priests," their songs representing hymns of praise. Indra achieves all his exploits in their company. Like Rudra, they are invoked to avert lightning, the arrow and the bolt from the worshippers, and also to bring healing remedies.

Vāyu and Vāta (wind) are almost interchangeable terms; when distinguished, the former is chiefly the god, the latter the element. The name "Parjanya" means literally "rain-cloud" which, when personified, becomes an udder, a water-skin or a pail Parjanya is also described as a bull that quickens the plants and the earth. '1

As regards Apah (the waters), the personification is only incipient. They are mothers, wives, and goddesses who bestow boons They are celestial as well as terrestrial, and the view has been mentioned above (in connection with Varuna) that the celestial waters were probably looked upon as an ether-like medium on which the luminaries made their fixed journeys along the Zodlac (rrta), and that the blocking of them by Vritra was supposed prevent the rise and movements of these luminaries, thus causing long darkness. As the waters are invoked as āpo in the Avesta, their defification is pre-Vedic

5. The Terrestrial Gods

Agni, a personfication of the sacrificial fire, presents in its conception the household life of the Vedic Aryans, and is second in importance only to Indra whose conception presents their external life of struggle and conquest. The anthropomorphism of the physical appearance of Agni is naturally very slight. He is butter-backed, and flame-haired, and eats the oblations with his tongue. Wood or ghi is his food, and melted butter his beverage, though he is invited also to drink the Soma with other gods. He is nourished three times a day. Although he is invoked to partake of the sacrificial offerings himself, he is more prominently the mouth by which the gods eat the sacrifice. His splendour is naturally his most prominent quality. He shines by day and night. He is called "smoke-bannered" (dhima-ketu) and is said to be supporting the sky with his smoke as with a post. He is a charioteer of the sacrifice and brings the gods in his golden lightning car. He is said to be the

son of heaven (Dyaus) and also of heaven and earth. Indra, with whom he is more closely associated than with any other god, is called his twin brother.

There are various myths about his births, forms, and abodes, He is daily produced from the two kindling-sticks (aranis), which are called his parents or mothers, and therefore he is ever young. though ancient. He is called the "son of strength," probably because of the strength required to kindle the fire, the ten fingers (called maidens) being exercised in the process. Agni's origin in the aerial waters is often referred to. As the Son of Waters (Apain napāt) he has become a separate deity. He is also said to be born in the highest heaven and was brought down from heaven by Mātariśvan (the Indian Prometheus). This is his third originthe celestial one. The three-fold nature of Agni is a favourite topic with RV poets; his heads, bodies, stations, splendours and births are each threefold. He is the earliest representative of the famous Indian trinity, and yet sometimes he is called dvi-janman ("having two births") from the point of view of a two-fold division of the universe into heaven and earth.

His connection with domestic life is a special feature. He is the only grhapoti (master of the house), the atithi (guest"), and a kinsman of men He is the dūta ("messenger"), par excellence, appointed by gods and men to be an oblation-bearer.

As the central figure of the sacrifice, he is called variously rittij, vipra, purohita, adhvarpu and brahman and is thus the divine counterpart of the earthly priesthood. He is pre-eminently "omniscient" or "one who knows all created beings" (jātavedas). The funeral hynn (X. 14) distinguishes between the havya-vāhana form of Agni (the conveyor of offerings) and the kravyād form of Agni, that burns the dead body on the funeral pyre

Even in the Indo-European period, the sacrificial fire was a well-known institution, as offering gifts to the gods by casting them into fire was customary among the Italians and Greeks. In the Indo-Irānian period a vast ritual had already developed around the sacrificial fire which is personified and worshipped as a beneficent god.

Rigvedic mythology is dominated by two all-pervading figures, the Sun and the Fire. There are but few deities in the Rigvedic pantheon that cannot be explained (though this may not be necessary) as manifestations of either the one or the other. Now the sun is regarded as a form of Agni (VII. 2. 1) and Agni is said to be born as the rising sun in the morning. This ultimate unity underlying the divine diversity may provide a solution of many a puzzle in Rigvedic mythology.

Brihaspati, also called Brahmanaspati (lord of praver), has but few physical features, and these are the usual ones ascribed to all other gods. Like Agni, he is both a domestic priest and a brahman

priest and the generator of all prayers. He is identified with as well as distinguished from Agni. Being often invoked with Indra (some of whose epithets like maghavan and vajrin he shares), he is drawn into the Indra myth of the release of the cows. Thus he has no homogeneous character, combining in himself, as he does, martial as well as priestly elements. As the divine brahman priest, he seems to have been the prototype of Brahman, the chief of the later Hindu triad. On the other hand, as the lord and creator of brahman, which played an important part in the later ritual and finally became the supreme principle in Vedänta philosophy, the god is very interesting from the point of view of the later religious and philosophical development of India

Next in importance to Indra and Agni comes Soma, because the Soma sacrifice was the centre of the Rigvedic ritual. As the Soma plant and its juice were ever present before the Rigvedic poets. the anthropomorphism is less developed than that of Indra or Varuna. The weapons of Soma such as the bow, his car, and his team are described. An entire book-the ninth-is devoted to Soma (the deity and the plant) and the preparation of the Soma juice The amsu (shoot or stalk) is pounded between stones called adri The pressed juice, in the act of passing through the filter of sheep's wool, is called pavamāna (or punāna) "flowing clear" The juice thus purified and as yet unmixed is called sukra or suchi (bright). also śuddha (pure). This filtered Soma next flows into jars (kalaśa) or vats (drona) where it is mixed (technically "cleansed") with water and milk to sweeten it The Soma has three kinds of admixture (āśır), with milk (go), sour milk (dadhi) or barley (yava). The admixture is poetically described as a bright robe. Soma is thus pressed three times a day, the morning libation is the first drink of Indra, the midday one belongs to him exclusively, while the evening pressing is for the Ribhus. The admixture of Soma brings him into a special relation with the Waters, who are called his "mothers" or "sisters." Some is also the lord of streams

The exhilarating power of Soma is appreciated It is a divine drink conferring immortality on gods and men. It is called amyita, the "draught of immortality" Soma has curative powers also. As a deity, Soma is a wise seer, a poet, who stimulates thought and inspires hynns The fact that Soma invigorates Indra in his fight with Vritra is repeated so often that Indra's exploits and cosmic actions come to be attributed to him.

Like the corresponding Haoma in the Avesta, Soma grows on the mountains, but his true origin is said to be in heaven, from which he was brought to earth by an eagle. Soma is a king; the lord of plants or lord of the wood (vanaspati). In a few of the latest hymns of the RV, Soma is mystically identified with the moon.

The preparation and offering of the Soma was a feature of Indoranian worship. There are numerous similarities between the Soma and the Haoma (Avestan) cults. The belief in an intoxicating beverage of the gods, a kind of honey or mead, may probably go back even to the Indo-European period.

Among the remaining terrestrial deities, Prithivi is so closely associated with Dyaus, that generally they are celebrated conjointly, Dyaus being never lauded alone in any hymn, while Prithivi alone is invoked only in one short hymn of three stanzas (V. 84). The personification is so slight that the attributes are mainly those of the physical earth. Certain rivers are also lauded, the most important among them being the Sarasvati in whose case the personification has made greater progress than in the case of the other rivers like the Sindhu (Indus) and the sister streams of the Punjab, namely Vipáš (Bešs) and Sutudrif (Sutlei).

The progress of religious thought in the RV is discernible in the transition from the concrete to the abstract and in the rise of abstract deities, the earlier and the larger class of which originated from epithets applicable to one or more of the older deities, like Tvashtri, Prajāpati, etc. A smaller class consists of personifications of abstract nouns like Manyu (wrath), Śraddhā (faith), etc. Goddesses play a very unimportant rôle, the only notable exception being that of Ushas Dual divinities like Mitra-Varuna and Dyava-prithivi (dual compounds with each member in the dual) are a special characteristic. Groups of deities, like the Maruts (a large group associated with Indra, Agni, and Soma), the Aditvas (a small one, with Varuna as chief), and the Vasus have been already mentioned. An allembracing group is that of the Visvedevas (the All-gods). A few divinities there are of the tutelary order, like Vastoshpati (lord of the dwelling), Kshetrasya-pati (lord of the field), and Sītā (the furrow).

Various features of the earth's surface such as mountains, besides rivers and waters and plants, and artificial objects like sacrificial implements and weapons are also deified, in addition to the great phenomena of nature.

The Demons, often mentioned, are either the aerial foes of the RV only) or constitute a lower class of terrestrial goblins, commonly called Rākshasas or a species designated by the term yātu or Yātu-dhēna. Magical practices are dealt with in about a dozen hymns in the tenth Mandala which treat of augury or spells against poisonous vermin, diseases, a child-killing demon, enemies in general, and trival wives. Incantations to preserve life, to bring on sleep, and to procure offspring are found in X. 58-60; VII. 55, and X. 183 respectively, while the well-known Frog-hymn (VII. 103) (ante, p. 349) is supposed to envisage frogs as magical bringers of rain.

The first four out of the so-called funeral hymns (X. 14-8) (ante, p. 352) are addressed to deities who control life after death.

Some of the significant aspects of Rigvedic mythology may now be summed up thus:

(1) The principal phenomena of Nature, con: eived as alive and represented in anthropomorphic (not rarely in theriomorphic) shape, were the objects of worship. (2) The so-called simple primitive side of Nature-Worship may be supposed to be reflected in the adoration of plants, trees, and mountains. (3) A great god like Indra is sometimes conceived as a bull, or the Sun as a horse, but totemism in the sense of the actual direct worship of animals, or the belief in an animal ancestor, is not to be thought of. Vritra (the drought-demon), for example, is conceived as a snake, but the snake receives no worship. (4) Whether fetishism is to be read into a reference to an image of Indra, and whether the worship of idols or images of gods was known to the Rigueda, are points on which no certain conclusions can be reached.

2 SACRIFICE

It is hardly any wonder that the humanized gods of the Rigveda should share some human weaknesses and be susceptible to flattery and gifts. A full meal was certain to win divine favour Thank-offerings were known. Though the feeling of dependence was there, and though the surrender of one's property and possessions became ultimately the mark of deep affection for God, it was the definite hope and expectation of rewards that chiefly inspired the offering of prayers and oblations in the Rigueda But who was to carry the offerings from earth to the gods in heaven? Very naturally the fire, with its towering flames and ever-rising smoke, already desfied as Agni (as Atar by the Iranians), was thought of as an intermediary and messenger and as a bearer of oblational offerings from men to gods. The sacrificial fire is, in fact, an Indo-European institution, as the Romans, the Greeks, and the Iranians also had the custom of offering gifts to the gods in fire In the Indo-Iranian period already an elaborate ritual, in the keeping of the priestly class, is found developed around the sacrificial fire.

In the Ripoeda, the sacrifice is yet only a means of influencing the gods in favour of the offerer, and it is doubtful whether in this age the conception of gods as subject to control by the worshipper, if he only knew the correct means, was developed, and whether the selection of the horse as a sacrifice was motivated by the belief that thereby the swift steed—the sun—regained strength and favoured the worshipper. As regards the more mystic view of the sacrifice as a sacrament, the common meal of the priests on the sacrificial victim may only be looked upon as a bare hint in that direction, because though the priests believed that this meal brought them into

a special relationship with the god who by sharing it with them acquired in part the same nature as themselves, it is doubtful whether they deemed themselves to be consuming the victim. It may be noted in this connection that union or companionship with the gods (I. 125.5) or with the sun is vouchsafed to those who give liberally or those who are generous with the sacrificial fees.

If we remember that the Rigueda-Samhitā is composed of earlier and later portions, it will be easy to understand how, on the one hand, a large number of the hymns arose independently of all sacrificial ritual, although many of these were used later on for sacrificial purposes, and how, on the other hand, many other hymns were from the first intended for nothing but sacrificial songs and litanies. Two varieties of this sacrificial cult are to be noted in the main, as follows:

(1) Certain hymns and verses of the RV were used as benedictions and prayers at birth, marriage, and other occasions of daily life, at funerals and ancestor-worship, as well as at ceremonies for ensuring the fertility of the cattle and the growth of the fruits of the field These ceremonies, called grihya karmāni, were, as a rule, associated with sacrifices of the simplest type, viz. burnt offerings (i e. offerings of milk, grain, ghi, or flesh thrown into the fire). At these, the householder himself (who was assisted, if necessary, by one single priest, the Brahman) officiated as the sacrificial priest and the single fire of the domestic hearth served as the altar. These simple sacrifices which every one, rich or poor, performed according to his means, consisted chiefly of prayers (the first stage of the Vedic religion). In addition to these and a few incantations in the tenth Mandala which represent popular religion consisting of spells to defeat rivals, to prevent and cure diseases and to repel noxious animals, we have (2) the grand sacrifices, especially in connection with the Soma-cult relating to Indra, which could only be undertaken by aristocratic and wealthy men (maghavan), and especially by the kings. An extensive sacrificial area with three altars for the three sacred fires, and a multitude of priests headed by four chief priests who received liberal payment (dakshinā) for the joint performance of numerous elaborate and intricate rites and ceremonies on behalf of the yajamana (sacrificer) who did very little himself, characterized these Srauta sacrifices. The hymns of the RV are much occupied with the Soma ritual. Animal sacrifices are indicated by the apri-suktas, and the horse-sacrifice (asvamedha) was undoubtedly performed. The Purusha-Sükta, does not describe an actual human sacrifice, but merely preserves, in all probability, the memory of it, as it was performed in prehistoric times, because the Sunahsepa hymns of the Rigveda (I. 24-30 and IX. 3) are not exactly related to the Sunahsepa legend of the Aitareya Brahmana

which is probably reminiscent of human sacrifice in pre-historic times.

3. PHILOSOPHY

It has been generally held that the Rigvedic religion is essentially a polytheistic one, taking on a pantheistic colouring only in a few of its latest hymns. Yet a deeply abstract philosophizing crops up unexpectedly in some hymns as a reminder of the long journey made from primitive polytheism to systematic philosophy, through the stages of naturalistic polytheism, monotheism, and monism.

The plurality of gods could not satisfy the intellect of the Rigvedic seers. One god was therefore identified with another, or gods were invoked in pairs or conjointly in groups of three or more. Systematization took the form of the classification of the gods into different categories or of the amalgamation of them all into one comprehensive group of the "All-gods." This systematization was but a step forward towards the more logical monotheism. There cannot be more than one supreme and unlimited Being pearance of what Max Muller calls henothersm is due to this unconscious urge towards monotheism imperfectly moulding polytheistic tendencies and thus presenting an inconsistent picture. When "individual gods are alternately regarded as highest," a large number of attributes, personal characteristics, and functions become common to all the gods, the merging of all these qualities into one divine figure becomes easy, and thus polytheistic anthropomorphism evolves into a kind of spiritual monotheism.

But the Riggeda betrays discontent even with this monotheistic development and the single supreme anthropomorphic deity that should follow from it. RV, I. 164.4 asks "Who has seen the first-born, when the boneless one bore the one with bones? Where is the life, the blood, the self of this bhumi (universe)? Has anyone approached the knowing one to ask this question?" As if in answer to this question, verse 46 of the same hymn affirms that the central principle was the sexless sat (the "real") which, though one, was called by various names, Indra, Mitra, Varuna, Agni, Yama, Mătariśvan, etc. Thus, in some of the late hymns of the Riqueda, which designate indifferently the Supreme or Absolute as "He" or "It." is reflected the usual vacillation between monotheism and monism met with in all philosophies. In the opinion of the present writer, the transition from monotheism to monism was effected smoothly and almost unconsciously. owing to the growing influence of the conception of Rita. As mentioned above, the primary sense of Rita, appearing alongside of, and yet clearly distinguished from, its secondary sense or senses, is the physical one. Rita is the path of the Zodiac within which the apparent motions of the devas (luminaries) are confined and

which is dotted by the nakshatras. No wonder that the devas are said to be born in Rita and governed by it. Rita next comes to denote very naturally the cosmic order or law prevailing in nature. In the moral world, the word designates "order" through the meanings "truth" and "right," and in the religious world "the order" takes the form of sacrifice or rite. The way to the later conception of the Absolute. which is impersonal and is designated by the neuter terms sat or brahman, has been paved by this abstract conception of Rita, which looks like the earliest crude precursor of the Absolute of the later Vedänta.

The problem of the origin and nature of the world-stuff is a philosophical one, and is not neglected by the Rigyedic poets, RV, X. 190 tells us that from heat (tapas) were produced rita and satua; then night, the ocean, and samuatsara (year) were produced in succession... RV. X. 72. 2 says that sat was produced from asat. From the mythological point of view, each one of the gods in turn is said to be the creator of the universe, the universe being sometimes looked upon as the finished product of the carpenter's and joiner's skill For example RV, X. 31. 7 asks "What was the wood, which the tree, out of which they fashioned heaven and earth?" RV, X 121 takes up the problem of creation on a monotheistic level and tells us that Hiranyagarbha arose from the great waters, pervading the Universe, and thus created the world out of eternally pre-existing matter But X, 129-the well-known Nasadīva hymn -describes creation from the highest monistic level. "In the beginning, there was no 'Non-existent,' because this creation arose therefrom, nor the 'Existent,' because its usual manifestations-the firmament or the heaven beyond it-were not then The One breathed by itself breathless, and there was nothing beyond it There was no death then, how could there be anything immortal then? There was no light which could give us distinctions like night or day." Thus is suggested the highest philosophical truth that we cannot characterize the Absolute because of the inadequacy of our categories Tapas is the warming up of being into existence. whereby is developed from the Absolute the implication of the primary antithesis, namely the opposition of ego and non-ego. The hymn further tells us that Desire (Kāma), the germ of the mind betraying self-consciousness, is the bond binding the existent to the non-existent. The doubt expressed at the end as to whether anyone knows the truth about creation is a beautiful expression of the ignorance of the wise. This hymn rises to the breath-taking heights of monism and leaves behind the dualistic metaphysics of the hymn to Viśvakarman (X. 82) wherein we are told that the Waters contained the primordial germ-the floating world-egg from which arises Visvakarman, the first-born of the universe-the creator and maker of

the world The Nāsadiya hymn, in the terminology of modern philosophy, makes nature and spirit both aspects of the One, the Absolute, which is neither the self nor the non-self.

The word mayā in the RV generally denotes "occult power" applicable in a good sense to gods and in a bad sense to demons, and may be rendered by the English word "craft", having a similar double application. But, as noted above (p. 353), in X. 54. 2 it is used in the sense of "illusion" or "show," thus forestalling later Vedānta philosophy. It may be safely affirmed, however, that the Rigvetic tendency is towards a naive realism, not monistic idealism, towards which the general spirit of Indian thought was soon to drift If X 72. 2 says that the "existent" was produced from the "non-existent," all that is meant is that the manifest arose from out of the non-manifest. If being or non-being is postulated as the first principle, it is strictly from the point of view of the world of experience.

Instead of the five elements of later philosophy, the RV postuonly water as the primordial element or matter, from which
the others gradually evolve. In the Purusha-State (X 90) the body
of the Purusha is said to be the original material, as it were, out of
which the world is made. The gods are the agents of creation, the
act of creation is a sacrifice, and the Purusha is the victim. Although
anthropomorphism, pushed to the last limit, is responsible for the
greatness of God and the unity of world and God, being described
in terms of the gigantic dimensions of the Purusha, the hymn X
90 is a sort of crude allegory of the theory of creation from the
One Absolute found in X. 129. Only, here the Supreme reality
becomes the active Purusha—the begetter as well as the begotten:
"From the Purusha Virât was born, and from Virât again the Purusha." (X 90 5)

4 ETHICAL AND SPIRITUAL THOUGHT

As the Riguedic Aryans were full of the joie de vivre, they were not particularly interested in the life after death; much less had they any special doctrines about it We can therefore glean only a few notices of the life beyond, that are scattered throughout the Rigueda

Two separate rathways along which all moving creatures travel, namely the path of the Fathers and that of the gods and mortals, are spoken of in X. 88 15, and it is supposed that there is a reference here to the way to the other world Companionship with the Sun and the gods and immortality are highly prized goals (X. 107, 2; 1. 125. 5). After his death, a man is supposed to enter the kingdom of Yama (who and his sister Yami were primeval twins) Yama was the first of the mortals who died and discovered the way to the realm over which he rules and which is the deserted

tination of the subsequent dead. The spirits of the departed ones are supposed to go through whitpirta to this paradise, where Yama and the Fathers Iive in the midst of the joys of immortality, and the spirits are material enough to enjoy such pleasures as the drinking of Soma, milk, honey, and surā, as also music This is hardly surprising, as the goal of all human endeavour is to become like gods. This heaven is reached through sacrifices and worship of the gods. The spirit is endowed with a shining form in heaven (X. 14. 8).

Hell is represented as a place of punishment for evil-doers (avratas). This is characterized as low and dark (X, 152, 4), as a kind of pit (IX. 73. 8). There is, however, no sordid picture of hell and its terrors. In our search for any reference, implicit or explicit, to rebirth or transmigration, we come across only a few doubtful passages. According to RV. 1, 164, 30, "the soul (weak) of the dead one moves in its own power, the immortal one having a common origin with the mortal one (the body)." But this translation is not certain The reference in RV, X. 15. 2 to Pitris who reside in the earth-region or in the dwellings of men need not imply belief in the soul as a ghost revisiting the haunts of men, but may only be the germ of the idea of the acceptance of the funeral (Śrāddha) offerings by them which became so famous at a later time. RV, X. 16. 3 exhorts the soul of the dead to go over to heaven or earth, to the waters or to the plants, along with all its physical parts. But is this going over a rebirth? In X. 58 the departing spirit of a dving person is called back from Yama, from heaven, earth, the quarters, the sea, the waters, the sun, the dawn or the mountains, 1.e from wheresoever it may have gone to So we may conclude that only the germs of the conception of rebirth were there, and these developed either naturally, or through the influence of ideas current among the original tribes with whom the Arvans came into contact.

RV, VII. 86. 6 and 88. 5, 6 clearly show that the consciousness of sin (anrita, āgas, enas) was recognized. Sin resulted from the violation of rita or "order" in the moral sphere (i.e. of "truth" and "right") as well as in the religious one (i.e. of sacrifice or rite), or of the commands of God. In the unalterable law of good or bad effects, flowing from good or bad conduct, are to be found the first germs of the law of Karman (that most outstanding characteristic of Indian thought)—binding on gods and mortals alike. Offering prayers and performing rites, living in short in perfect harmony with the will of God—this was the ideal moral life according to the RV. Man owes some duties to his fellow-beings also (X 117). RV, V. 85. 7 tells us that an offence against a friend, neighbour, or comrade, or even a stranger is a sin (āgas). Adultery, witchcraft, gambling, drinking, senselessness, and self-deception are ranked as de-

viations from the moral life. The view, therefore, that the socalled uncertainty of the fate of the evil after death is a vagueness characteristic of the comparative indifference to morals, and that if gods are extolled as true it is not an assertion of ascertained truth. is wrong.

On the whole a very optimistic outlook on life is revealed in the hymns of the RV. Not that the Rigyedic Arvans do not desire immortality (amritatua) or the company of the gods in heaven. As we have seen above, there are many hymns and stanzas which raise questions and posit answers, all inspired by the eternal quest of the human heart for a solution of life's problems. These hymns betray a metaphysical streak and a flair for cutting the Gordian knot of philosophy-seeds which were to blossom later into the wild yet beautiful garden of the Upanishads. But the joys and pleasures of this world interest them deeply Thus the Rigveda is full of prayers for long life, freedom from disease, heroic progeny, wealth, power, abundance of food and drink, the defeat of rivals, etc. There is no trace of pessimism in the thoughts of the Rigvedic sages. Whether life was a reality or illusion, substance or shadow, they want to enjoy it to the full. They do not seem to subscribe to the doctrine that life is a misery, which can only be ended by eradicating desire or vāsanā, the cause of the ever-recurring cycle of births and deaths-a doctrine developed later by the Buddhists and found in the Vedanta The religious thought, therefore, betrays a practical streak The worship of the powers of Nature is sincere but utilitarian, and do ut des is quite openly the theory of all sacrifice and homage

GENERAL REFERENCES

Macdonell, A A: Vedic Muthology (Strassburg, 1897).

```
1 Riaveda Repetitions, Preface, p xviii
```

¹a VM, p 16 2 Cf Ch XVI, p 343 For a beautiful hymn in the Atharva-Veda cf Ch XX.

pp 417-8 3 Paradise Found (Tenth Edition, 1893) Part V, Ch V, pp 250-60

The Arctic Home in the Vedas, p 233-96 5 RV, X 121 1 and 3 ff See also Sat Br., XI 1 6 1; Ait Br., I 1; and Manusmriti, 1 9

⁸ VM, p 122. 7 VM, p 123. 8 Ind Stud, 5 234 9 Orion, p 205.

⁹a For some specimens, of Ch XVI, pp 344 ff

⁹b Cf Ch. XI, p 227.
10 Zimmerman, A Second Selection of Hymns from the Rigueda (Second Edition 1922), Appendix IV, pp CI ff 11 Cf the hymn to Parjanya quoted in Ch XVI, pp 347

CHAPTER XIX

SOCIAL AND ECONOMIC CONDITIONS

I. SOCIAL CONDITION

1. Family Life

THE foundation of social life was the patriarchal family. In Rigveda (I. 24. 12-15 and V. 2. 7), where we find the rudiments of the Sunahsepa story, a kind of absolute control by parents over children is suggested. That family discipline was strict is illustrated by the case of Rijrāśva who was deprived of his sight as a punishment by his father (I. 116. 16). Similarly in RV, X. 34. 4 we are told how the insolvent gambler is disowned by his parents and brothers, in front of his creditor. This does not mean that the relation between the parents and children was not generally one of warm affection; for a father is looked upon as the type of all that is good and kind. The wedding hymn (X. 35) indicates that the newly-married wife rules over (or wins by her love?) her brothers-in-law and even over her husband's parents although she herself entertains a feeling of respect for them. This is clear evidence of joint family life. That under certain circumstances this joint family included the wife's mother is suggested by X. 34. 3 where the gambler complains that "his mother-in-law hates him." After the death of the father, the eldest son took charge of the family.

A notable feature of the etiquette of the Rigvedic age was the great store set on hospitality. The frequent epithet of Agni. viz., Atithi, the beloved guest in human abodes, takes for granted the affection and respect generally shown to a guest. No wonder that in later literature detailed descriptions of the merits of hospitality should occur, and that hospitality to a guest should be elevated to the rank of a religious duty, as one of the five great daily sacrifices (païcha-mahāyafias).

2. The Caste System

The elaborate institution known as the Caste System among the Hindus in India may almost be said to be without a parallel in the world, although there is hardly a country where classes or orders of society or grades of social distinction of some kind or other are not met with. A common origin, name, tutelary deity occupation, and ceremonies generally distinguish one homogeneous caste-group from another, but to-day caste is rigidly fixed by birth, and exclusive commensality and communium between the members of a caste-group to the exclusion of all others are its funda-

mental and outstanding characteristics. Further, the conception of impurity communicable to a higher caste by contact with a lower one underlies this fissiparous tendency, and has resulted in the untouchability of the so-called Sūdra, who by popular error is almost indentified with the pañchama, or one outside the framework of the Chāturvarnya. Again, in place of the four original varnas or class-groups, there are today thousands of caste divisions and sub-divisions and the number is still growing. This unique development of an ordinary social phenomenon naturally invests its history with a special importance.

The extent to which caste had been developed in the age of the figureda Sanhhitā has formed a subject of keen controversy among scholars. The uncertainty regarding the exact interpretation of the basic words and phrases in the Rigueda, and the relative chronology of the various relevant passages scattered throughout that Veda, make it difficult to arrive at any conclusion that is likely to meet with general acceptance We shall, therefore, state first of all in detail the most widely accepted version—in a sense, almost the recognized version—of the development of caste in the Rigueda. Contenting ourselves with only a brief statement of divergent views. Much confusion will be avoided, if we keep in view the fact, generally agreed to, that the development of caste has been a progressive one, and that we should not expect in the Rigueda Sanhitā the picture of the Caste System which is presented even in the Vaiurveda Sanhitās.

There are various speculations in later Brahmanical literature argaing the origin of castes. The most common is that which represents the Brāhmanas, Kshatriyas, Vaisyas, and Sūdras to have been created respectively from the head, breast or arms, the thighs, and the feet of the Creator. An echo of this is found in a hymn of the RV (X. 90), the famous Purusha-sūkta, which describes the mythical legend of the sacrifice of a primeval giant called Purusha, the ideal "Man" or World-Spirit. The relevant passage has been translated thus:²

"When (the gods) divided Purusha, into how many parts did they cut him up? What was his mouth? What arms (had he)? What (two objects) are said (to have been) his thighs and feet? The Brāhmana was his mouth; the Rājanya was made his arms; the being (called) the Vaisya, he was his thighs; the Sūdra sprang from his feet."

This passage refers to the first three Castes not as sprung from, but as identical with, the mouth, arms and the thighs of the Creator. But in spite of this difference many regard this hymn of the RV as the earliest exposition of the later Brahmanical view, and regard the essential features of the Caste System as existing even in the earliest Aryan society in India.

SOCIAL AND ECONOMIC CONDITIONS

This theory has been challenged by many scholars whose views may be briefly stated as follows:

The evidence of the Purusha-sūkta, an admittedly late hymn, is not valid for the bulk of the Rigueda, which was produced by the as yet un-Brahmanized tribes of Vedic Indians living in the Indus region and the Punjab. The Caste System was developed only later, when a section of these Vedic tribes migrated farther east. The term Varua (lit., Aryan colour) is used in the Rigueda of all the three highest castes of later times, being contrasted only with Dāsa (the dasyu-varua or "aboriginal colour"). The terms "Rājanya," "Vasiya" and "Sūdra" occur only in the Purusha-sūkta, the term "Brāhmana," also, being rare in the Rigueda. The term "Kshatriya," of which "Rājanya" is an earlier variant, occurs but seldom in the Rigueda. The term "Brahman" denotes "a priest by profession" only in some passages, while in others it denotes any person who was distinguished by genius or virtue, or one who, for some reason. was deemed specially receptive of the divine inspiration.

The transition from the casteless, though classified, society of the bulk of the Rigveda to the elaborate Caste System of the Yajurveda is to be traced to the complication of life resulting from the further migration of the Vedic Aryans from the Punjab to the east. The necessity of carrying on a ceaseless fight with, and the conquest of, the aborigines called for an organization of the conquering people by the merger or fusion of petty tribes into centralized kingdoms. Thus emerged the powerful monarch, while the lesser tribal princes, deprived of their royal rank, sank to the position of nobles. The monarchy, moreover, needed now a standing armed force, prepared to meet all eventualities, such as resisting the sudden incursions of native or other Aryan tribes and quelling revolts on the part of the subdued aborigines. This standing army was naturally recruited from the ranks of the nobility of tribal princes and the chief armed retainers of the king. This is the genesis of the warrior class At the same time, the "people" of the Aryan masses, secure in the protection afforded by the warrior class, ceased to take interest in military matters and settled down to a peaceful life devoted to agriculture, pastoral pursuits, trade, and industry. They constituted the third class, the Vis, later called "Vaisyas."

Side by side also grew a distinct community of priests In the earlier period, not only the householder but even the petty prince could offer sacrifice to the gods for himself and his people, the ritual being very simple. But when the size of the kingdom grew and military and administrative affairs kept the hands not only of the king but also of the warrior class full, while, at the same time, the ritual tended to become more complicated and elaborate, the need was keenly felt of a hieratic order, composed of the more intellectual elements among the non-fighters who could dedicate themselves,

undisturbed by the distractions of war or peace, to the faithful and exact performance of the highly developed ritual, and to the preservation (by word of mouth) of the traditional formulae and sacred hymnology of the Aryans, a heritage in part at least from almost prehistoric times.

As regards the fourth class, the Sudra is mentioned for the first and only time in the "Purusha-sukta." But dasyu and dasa are known to the Rigueda, both as aborigines independent of Aryan control and as conquered slaves. The latter may reasonably be supposed to represent the Sudras of the later texts. But not all the defeated aborigines could be absorbed as slaves in the royal household or in the houses of individual owners. There must have been whole villages of the aborigines, though under Aryan control. The term "Sūdra" was evidently applied to the inhabitants of these villages as well as to the wild hill tribes which lived by hunting and fishing and acknowledged the overlordship of their Aryan neighbours. In course of time it included even dasyu-varna (or dark-skinned) people who remained beyond the pale of the Arvan state and who were virtually excluded from the religious and ritual cult of the Arvans. The development of the Caste System in a rigid form, with strictly hereditary and mutually exclusive castegroups, did not take place till the time when the Vedic Aryans had settled down in the Middle Country and were already Brahmanized enough to look upon the inhabitants of the North-West-the home of the Rigveda-as uncivilized Vratyas because they did not follow the strict Caste System.

The view summed up above may be regarded as the one now generally accepted by scholars. According to this recognized version, in the earliest society represented by the bulk of the Ripveda there were probably different classes and professions, but none, not even the priestly and the warrior classes, were hereditary; the warriors were drawn from the people at large, and any person with the requisite qualifications could officiate as a priest.

This view is not, however, accepted by some whose arguments may be briefly stated thus: (1) The main, if not the earliest part of the Rigueda was, in all probability, composed not in the Punjab but in the east, in the country later known as the Madhyadesa or Brahmavarta. So the argument based on the non-Brahmanical character of the Vrätyas of the Indus and the Punjab becomes point-less. (2) The term Brahmaya, "son of a Brahman or priest," suggests that the priesthood was normally hereditary. There is no definite instance of a person other than a priest exercising priestly functions. Nor was this feasible, as the priesthood, even in the Rigueda, distinguishes within its fold a vast number of sub-groups of specialists and experts. (3) The power of the Purohita over the king in the Rigueda, deirubale from the fact that the correct perfor-

SOCIAL AND ECONOMIC CONDITIONS

mance of the sacrifice demanded the services of a hereditary priest. is nearly as great as in the post-Rigvedic age. (4) The Rigveda knows of a ruling class-the Kshatriva-who, as a class of nobles, are appropriately named in the Purusha-sukta as "Rajanya" or "men of kingly family." As kingship was normally hereditary, the Kshatrivas were also in all probability a hereditary body. The Südras were admittedly a separate group; so all the elements of the Caste System were in existence in the age of the Rigveda. (5) There are glimpses in the Rigueda of a threefold (VIII. 35, 16-18) or fourfold (I. 113. 6) division of the people, corresponding to the well-known three upper or all the four divisions of the Caste System. (6) The existence of similar classes among the Iranians, namely priests, warriors, agriculturists, and artisans, makes it very probable that by the time of the Riggeda the four classes had developed into hereditary caste-groups, owing to the contact of the Arua-varna Arvans with the dark-skinned aborigines, and the necessity this imposed on Aryan society of reorganizing its whole structure.

Although there is great force in some of these objections, it must be conceded that they are not strong enough to upset the recognized version. The existence of the four classes in Avestan literature certainly argues for the existence of somewhat similar classes in Rigvedic society, but much stronger positive evidence is necessary to establish that these classes were hereditary.

Further, the term Brāhmana, son of a priest, occurs very rarely, and the word Brahmaputra, in the same sense, is found only once. This, when contrasted with the numerous references to Brahman, seems to indicate that there was no idea of a hereditary priesthood in the earlier Vedic period.

On the whole, it is difficult not to agree with the views, propounded long ago by Muir, that the Brahmanas (far less the Kshatrivas or Vaisvas) did not constitute an exclusive caste or race. and that the prerogatives of composing hymns and officiating at the services of the gods were not regarded, in the age of the Rigveda, as entirely confined to men of priestly families.3 The same thing was equally, or perhaps more, true of the minor professions. as the hymn, quoted above on p. 350, refers to the father, mother and the son following three different vocations in life, viz. those of a poet, a grinder of corn, and a physician. The heredity of occupation was, therefore, not yet a recognized principle, far less an established fact. The utmost that can be said is that there were recognized professions like priesthood, or distinctions of nobility, and these had in many cases a tendency to become hereditary, but, as in other countries or societies, their ranks might have been recruited from all sections of the community. Of the other essential features of the Caste System viz., prohibition of in-

terdining and intermarriage, no such restriction is even remotely hinted at in the hymns of the Riaveda.

3. Marriage and the Position of Women

The frequent mention of unmarried guls like Ghoshā, who grew up in the houses of their parents (I. 117. 7; X. 39. 3; 40. 5), the references to the ornaments worn by maidens at festival occasions in order to win lovers (I. 123. 11; VII. 2. 5), to a youth's courtiship of the maiden he loves (I. 115. 2), to the lover's gifts (I. 117. 18), to their mutual love (I. 167. 3; IX. 32. 5, etc.) and to the spell (VII. 55 5. 8) by which a lover hopes to lull the whole household to sleep while he visits his beloved—all this evidence speaks in favour of the custom of girls normally marrying long after they had reached puberty. Some of the passages mentioned above, but not all, may refer to the hetaera class as existing in Vedic society. The marriage ceremony also supports this view, as it is presumed to be immediately followed by consummation (X 85 29 ff).

The restrictions on the field of choice in marriage were few. Marriage connections with the dasyn-varna people, with whom the Aryans came into conflict in India, were probably prohibited Among Aryans only the marriages of brother and sister (X 10), and of father and daughter were banned.

There seems to have been considerable freedom on the part of young persons concerned in the selection of a wife or husband, as they generally married at a mature age. There is no clear evidence that the consent of the parent or brother was essential. The latter appeared on the scene after the parties concerned had come to an understanding, and their participation as well as that of the "wooer" (sora) in the formal "wooing" was a mere formality, though it was an essential prelimnary to the marriage ceremony.

The uncomplimentary references to some sons-in-law (VIII 2. 20; I. 109. 2) suggest that in some cases a bride-price was paid by a not very desirable son-in-law. Similarly when gurls had some physical defect, dowries, it seems, had to be given (VI. 28. 5; X. 27. 12). When Vimada carried off Purumitra's daughter against his will, but probably with the consent of the daughter (I. 112. 19; 116.; etc.), we have an admixture of those elements which led to the formulation, later, of the Gändharva and Räkshasa forms of marriage.

A hymn in RV (X. 85)—which may be called the wedding hymn—gives us some idea of the oldest marriage ritual. The bridegroom and party proceed to the bride's house (X. 17. 1), where the well-adorned bride remains ready (IV. 58 9) to join the marriage-feast. The guests are entertained with the flesh of cows killed on the occasion (X. 85. 13). The ceremony proper now commences. The bridegroom grasps the hand of the bride and leads

SOCIAL AND ECONOMIC CONDITIONS

her round the fire (X. 85. 36, 38). These two acts constitute the essence of the marriage and the bridegroom is now the husband who takes her by the hand (hasta-grabha: X. 18. 8). The bridegroom next takes the bride home in a car, in a wedding procession (X. 85. 7, 8, 10, 24-27, 24). Then follows the consummation which is signified chiefly by the purification of the bride's garment (X. 85. 28-30, 35).

Perfect harmony and happiness are prayed for in conjugal life, which (it is hoped) will be long enough to bless the couple with sons and grandsons (VIII. 31. 5-9; X. 34. 11; 85. 18, 19, 42 ff.). X. 85. 46 describes the newly married wife as taking up a most respected position as the mistress of her new household, wielding authority over the husband's father, brother, and unmarried sisters. This verse envisages the case (very probably) of the marriage of the eldest son in the family, when the old father has retired from active life. The authority exercised must have been more or less the rule of love. The wife participated regularly in the sacrificial offerings of her husband.

The fulfilment of the desire for offspring, and male offspring in particular, was the chief aim of marriage. Abundance of sons is constantly prayed for along with cattle and land, but no desire for daughters is expressed. This desire for a son is natural in a patriarchal organization of society. The son alone could perform the funeral rites for the father and continue the line. Sonlessness was as much deplored as poverty (III. 16. 5). The adoption of sons was recognized, though not favoured (VII. 4. 7. 8).

There is very little evidence of the prevalence of the custom of Sati or widow-burning in the Rigueda, though we may detect a semblance or reminiscence of this ancient custom in X. 18. 8, where the widow is asked to descend from the funeral pyre of her dead husband on which she was first made to lie. The only safe conclusion would be that the practice, even if known, was not widely prevalent, or at best was confined to the Rājanya class, if Indo-Germanic parallels are a correct guide. Rigueda, X. 40. 2 and X. 18. 7, 8 point to the practice of requiring a childless widow to cohabit with her brother-in-law until the birth of a son. This niyoga is a kind of short-term levirate. These passages (and I. 124.7 also which mentions a gartā-ruh) are clear evidence that the remarriage of widows was permitted in certain circumstances, though there is no clear or definite reference to it in RV.

The Rigreda certainly permits polygamy (I. 62. 11; 71. 1; 104. 3; 105. 8; 112. 19; 186. 7; VI. 53. 4; VII. 18. 2; 26. 3; X. 43. 1 101. 11, tet.), though monogamy may have been the rule (I. 124. 7; IV. 3. 2; X. 71. 4). Whether monogamy developed from polygamy in the Rigredic age as Zimmer⁴ thinks, or whether polygamy is secondary

as Weber' believes, cannot be decided. Probably polygamy, though allowed, was practically confined to the Rājanya class. Polyandry is not referred to anywhere in the Rigoreda. The few passages in the wedding hymn (X. 85. 37, 38) in which "husbands" (plural) are spoken of in connection with a single wife can be explained on a mythological basis. Female morality maintained a high standard, the same degree of fidelity not being expected from the husbands.

There are few doubtful references to lovers and love-making (I. 134. 3; VIII. 17. 7). A raha-sūh, "bearing in secret" is mentioned in II. 29. 1. A protégé of Indra is referred to as the "castaway" (parāvrji or parāvrjikta), presumably as the offspring of illegitimate love. It is difficult to accept the view of Pischel and Geldanera that Ushas is the characteristic hetaera, nor are hetaerae referred to when women are described as going to the samana, though the dancer (nṛt'u) may have belonged to that class. The so-called incestuous intercourse between father and daughter in the story of Prajāpati (X. 61. 5-7), and between brother and sister in the dialogue between Yama and Yami (X. 10) can be satisfactorily explained (in the opinion of the present writer) on a mythological or astronomical basis.

Women had to be under the protection of some guardian or other; for example, in the care of their fathers until marriage, of their husbands after marriage, and of their brothers if not married; still they enjoyed much freedom. They did not always remain indoors, but moved about freely; they publicly attended feasts and dances, and there are references to "fair ladies flocking to festive gatherings."

4. Education.

In the Rigueda, there is no explicit reference to the ceremony of Upanayana or Initiation (lit., the drawing near or leading forth of a boy for study under the teacher) which is regarded as of such great importance in later ages. But all primitive people have some kind of ceremony, signifying the formal admission of an adult youth to membership of tribe, and we may infer from the closely parallel Indo-Iranian ceremony of Navjot that the elements of this ceremony probably existed in the Rigvedic age and even earlier.

The Frog-hymn (VII 103) quoted above, on p. 349, gives us a gilmpse of the educational system (if system it can be called) of the Rigvedic age. The fifth verse gives a picture of the earliest Vedic school by the comparison of the croaking of the frogs to the chorus of voices heard when a teacher recites the Veda, section by section (percon), and the pupils repeat his words after him. The first verse of the hymn suggests through a simile that this concerted school-reduction sprang into life suddenly, at a stated time (the opening of

SOCIAL AND ECONOMIC CONDITIONS

the monsoon?), because frogs raising their (rain-inspired) voices at the opening of the monsoon after lying low for (the rest of) the year are compared to Brāhmaṇas, conforming to their fixed annual routine (wrata). Evidently the entire instruction was orally given. Debates are also referred to (K. 71). The word "Brahmachārin" in the technical sense of a "religious student" is found in X. 108. 5. The father was not rarely also a teacher, his son taking lessons from him along with a few neighbouring students. That the sharpening of the intellect, as well as the development of character, in the Brahmachārin was simed at, is seen from the celebrated Gayatrī verse (III. 62. 10) which prays to Savitrı for a stimulation (a whetting) of the intellect

While there is no doubt that the instruction was orally imparted. it is a very debatable point whether the art of writing was known at all in this age. It is a well-known fact that no actual specimens of alphabets have been discovered in India which can be definitely dated before the fourth century B.C. Consequently most of the scholars are of opinion that the art of writing was unknown in ancient India Buhler sought to prove that the Indian merchants learnt this art in Western Asia and introduced it in their country some time about the eighth century B.C. This view, which regards the most ancient alphabet of India (the Brahmi alphabet of Aśoka's inscriptions) as derived from the North Semitic types of the ninth century B.C., now holds the field. But the discovery of the numerous seals at Mohenjo-daro, with pictographic writing (Ch. IX, p. 195) has put an altogether new complexion on the whole question. It is now believed by many that the Indus script formed the parentsource from which the oldest Brähmi alphabets have been derived. Some are even of opinion that when the Rigneda was finally arranged in its present form it was written in a script which formed an intermediate stage between the Indus script and the Aśokan alphabet. If we accept the old theory of Bühler, we have to presume that the vast Vedic literature was composed and preserved by oral transmission alone—a stupendous feat of memory which appears to be almost miraculous. On the other hand, if we believe that these voluminous texts were committed in those old days to writing, we are faced with the problem of writing materials, of which we definitely know nothing. The whole thing is shrouded in mystery which cannot be solved until more definite facts come to light.

5. Amusements and Entertainments

Music, both vocal and instrumental, was well known. The Frog-lymn (VII. 103. 7-8) refers to the musical charting of Brāhmaṇas engaged in the extraction of the Soma Juice. Different vocal sounds are carefully analysed in that hymn and elsewhere. Sing-

ing is often mentioned as adapted to different ends, such as "chanting," "reciting," "hymning," etc. Among instruments we find reference to the vind (lute or string-instrument), vôta (fitte or wind-instrument), and the drum. The dancing of maidens is mentioned. Probably, men also danced, as is implied in a simile in K. 76. 6. The dialogue-hymns of the Rigueda have been the fruifful source of many theories regarding the earliest form of the drama (ente, p. 349). One theory is that they are relucs of old mysteries from Indo-European times. Dr. Keith' holds that dramatic spectacles, religious in character, were known in the Riguedia age. The chariot-race was a favourite sport and source of entertainment, and the race in general is the source of numerous similes and metaphors in the Rigueda. The fascination exercised by gambling and the ruin caused by addiction to it, is often referred to and is actually the subject-matter of a hymn (X. 34)

6. Food and Drink

Milk and its products, chiefly ghrita (ghī or clarified butter), formed the principal ingredient of food. Grain (yava) was parched or ground into flour with a mill-stone and then mixed with milk or butter, and finally made into cakes eaten in large quantities

Meat also formed a part of the dietary The flesh of the ox, the sheep, and the goat was normally eaten, after being roasted on spits or cooked in earthenware or metal pots. Probably meat was eaten, as a rule, only on occasions of sacrifice, though such occasions were by no means rare, the domestic and the grand sacrifices being the order of the day. This explains why horse-flesh was eaten only at the horse-sacrifice to gain the strength and swiftness of the horse. The cow receives the epithet aghnyo (not to be killed) in the Rigveda. and is otherwise a very valued possession. It is difficult to reconcile this with the eating of beef, but we may get some explanation if we remember the following: (1) Firstly, it was the flesh of the ox rather than of the cow that was eaten; a distinction definitely made. (ii) The flesh of the cow was (if at all) eaten at the sacrifices only. and it is well known that one sacrifices one's dearest possession to please the gods. (iii) Even in the Rigueda, only Vasas (barren cows) were sacrificed. For example, Agn: is called in VIII, 43 11 as vasanna. The expression "atithinir gah" (cows fit for guests) in X 68. 3 implies the same distinction

Milk, drunk warm as it came from the cow, was a favourite drink. Though the Soma juice, in Rigreda, appears exclusively as a sacrificial drink (as "Haoma.") it was prepared and similarly celebrated in the Indo-Trānian period), it must have been a very popular inebriating drink in the original home of the Arvans It had three kinds of admixture, with milk, sour milk, and gava. In the Rigredic

SOCIAL AND ECONOMIC CONDITIONS

period, surā was the popular drink, extremely intoxicating as compared to the Soma which, though mildly inebriating, was an invigorating beverage. Surā was probably distilled from grain. It is condemned as "leading people to crime and godlessness." Madhu, though often used to denote "Soma" or milk or any sweet food or drink, has also the sense of "honey" in the Rigueda.

7. Dress and Decoration

The dress (vasana or vastra) consisted of two garments according to the strictly Rigvedic evidence, namely the vāsas (or "lower garment" in a narrow sense) and the adhivāsa (an "over-garment" or an "upper garment"), though in the days of the later Samhitās, the nītis (or under-garment) came to be used in addition. The Maruts wear deer-skins, and a muni (X. 136. 2) is clad in skins or soiled garments.

The atka (a "garment") appears to be described as woven and well-fitting, though the real meaning is doubtful. Woollen clothing was in vogue. A sort of mantle or cloak (držpi) is often mentioned. A kind of embroidered garment (peśas) seems to have been used by female dancers (I. 92. 4, 5; II. 3. 6, etc.). A special garment was worn by the bride at the marriage ceremony; it was later given to a Brähmana and is called vädhtya. The Maruts are described as wearing mantles adorned with gold. There was a general fashion for dressing well as may be inferred from words like surdsas (well-clad) and suvasana, and there were garments of different colours too. There is no clear evidence of any differentiation between male and female dress.

Several ornaments are mentioned in Rigueda. The Karnaśobhana was "an ornament for the ear," apparently for the use of men (VIII 78. 3) and that it may have been a gold ornament is suggested by I. 122 14 which refers to a deity as gold-eared (hiranuakarna) The Kurira (X 85, 8) was some kind of head-ornament worn by females, specially brides. The same may be said of nyochanī (X. 85 6), a bride's ornament. Khādi was a kind of ring, worn as an armlet or an anklet (I. 166. 9: VII. 56. 13). Nishka was a gold ornament worn on the neck, and we shall presently see that it must have been of a size suitable for its use also as a sort of currency. Mani was some kind of jewel (whether "pearl" or "diamond" is not certain) worn round the neck (I. 122 14) was an ornament worn on the breast (II. 34, 2, 8). Garlands were often worn by men desiring to appear to advantage (IV. 38. 6. V 53. 4, etc.) One hymn (X 184 3) refers to the Asvins as "lotuswreathed."

The hair were kept combed and oiled. The use of the word "onasa" indicates that plaits were worn by women in dressing the hair. There are undoubted references to the custom of wearing the

harr in braids or plaits. A maiden had her hair made in four plaits (X. 114. 3). It seems from the descriptions of Rudra and Püshan that men also wore their hair plaited or braided, and the Vasishthas were noted for wearing their hair in a plait or coil on the right (VII. 33. 1). The beard and moustache are mentioned, but shaving is referred to (X. 142. 4). Most probably Kshura means "razor" in the Rioveda.

8. Knowledge of Medicine and Sanitation

The physician is often mentioned with respect for his skill. Miraculous cures are ascribed to the twin-gods, the Aśvins, who are the great healers of diseases and experts in the surgical art. Among diseases Yakshma is frequently mentioned (I. 122, 9; X. 85, 31; 97. 11, 12; 137. 4; 163. 1-6). It denotes "illness" in general, and probably "consumption" in particular, rendering the body emaciated. IX 112. 1 speaks of a physician wanting to cure a fracture in a way which seems to indicate that the practice of medicine was already a profession. The entire hymn X. 97 is addressed to the Oshadhis (the plants) with special reference to their curative powers. So herbs and plants figured prominently in the materia medica of this period. Prayers for long life are pretty frequent. The legends illustrating the reputed healing powers of the Asvins give us an idea of the general ailments and bodily mishaps. They are divinc physicians who restore eve-sight and cure the blind, sick, and maimed (VIII 18. 8; 22 10; I. 116. 16; X. 39 3). They rejuvenate the sage Chyavana (I 116. 10) and revive the sage Rebha when drowned and given up as dead. They give a cooling and refreshing draught to Atri Saptavadhri when suffering from suffocation. They cure Paravrii of blindness and lameness, and when the leg of Vispala is cut off in battle, they replace it with an iron one The last instance proves that a kind of primitive surgery was practised.

2. ECONOMIC CONDITION

1. Agriculture and Cattle

Agriculture made real headway during the Rigredic age, although the practice of ploughing can be traced to Indo-Irānian times. The operation of tilling the soil meant (as now) the cutting of furrows in the field with the wooden ploughshare drawn by bulls, the sowing of seeds in the furrows thus made, the cutting of the corn with the sickle, the laying of the bundles of corn on the threshing-floor, threshing, and finally sifting and winnowing. Irrigation was known, and helped cultivation. The exact nature of the grain which was thus grown cannot be ascertained. It was called Yava and may have been "barley" as it was understood to be in the later Sainhitäs. Rice was not cultivated until a later period.

SOCIAL AND ECONOMIC CONDITIONS

The Rigvedic Aryans were primarily a pastoral people and naturally cows and bullocks were their most valued possession. These constituted the chief form of wealth and the only original dakshina (sacrificial fee). The word "dakshina" in fact is an adjective meaning "right," or "valuable," with an ellipse of go (cow), because the sacrificial fee was a cow placed "on the right side" of the singer to be rewarded. Similarly one of the words for "fight" was quvishti "a search for cows." The name of Aghnua ("not to be killed"). applied several times to the cow, shows that the cow was coming to be regarded as a sacred animal. This feeling of sanctity of the cow can be traced even to Indo-Iranian times. Cows were kept in stalls during the night and in the heat of the day. They were allowed to roam freely in the pastures at other times, and were milked three times every day. The cow returning from the pasture-land in the evening and licking her calf fastened by a rope was one of the most gladdening sights, and the lowing of the milch-kine the most musical sound to the Rigvedic Aryans. There are even special terms like "sva-sara" for the time of the grazing of the cows in the morning, and sam-gava, for the time when the grazing cows are driven home together for the milking. The Rigveda is aware of the dangers to which the grazing cows were liable, such as being lost, falling into pits, breaking limbs, and being stolen. The ears of cattle were marked, probably to indicate ownership. Bulls and oxen were regularly used for ploughing and drawing carts. That the cow should give warm or cooked milk was a standing wonder. That the dark or red cow could give shining milk was little short of a miracle! (VIII, 93, 13).

2. Trade and Commerce

There are clear references in the hymns (I. 56. 2) to trading in distant lands for profit. The prayers and oblations offered for "gaining a hundred treasures" (III. 18. 3) are also probably those of merchants seeking divine aid for success in trade. Apart from trade with foreign countries, or alien tribes, there must have been quite an extensive inland trade, but no definite details are available. Haggling in the market was, however, well-known

The exchange of commodities on the principle of barter seems to have been in vogue, but cow had already come to be regarded as a unit of value (IV. 24. 10). There might have been other recognized units of value. Great importance attaches to one such unit called nishko. It meant originally a gold ornament of the shape of a necklace or a necklet (V. 19. 3). When, however, in I. 126. 2 the poet celebrates the receipt of a hundred nishkos with a hundred horses, as a gift, he could hardly be referring to a hundred necklets. So it probably came to be used as a sort of currency even during the Rigredic age.

Booty in battle was one of the sources of wealth to the State, and consisted chiefly of flocks and herds. In individual economy, dowry and bride-price played no small part. Movable property could change hands by gift or sale which amounted to barter. Land was not an article of commerce, and does not seem to have presented any problems in connection with the transfer of immovable property in the case of the family or of the individual. The population being scanty and scattered over wide areas, fresh land could be easily obtained, if needed by a family which had grown to a very large size with several sons. The rivers of the North-West are referred to as yielding gold

Whether any sea-borne trade was carried on during this age is a much disputed question, as already noted above (p. 248). The view that the Rigvedic Indians took part in ocean-shipping is opposed on the following grounds: (1) The nau (boat or ship) was, in the majority of cases, merely a boat or "dug-out" for crossing rivers, and there may have been large boats in use for crossing the broad rivers of the Punjab. These boats were so simple in their construction that only the paddle or oar (aritra) needed for propelling them is mentioned. There is no mention of masts or sails, of rudder or anchor. Thus the Vedic Indian was not much of a navigator. (2) Metaphors used by a people familiar with the ocean are lacking in the Riggeda. (3) The numerous mouths of the Indus are ignored. although that river was the convenient natural outlet to the sea Against these arguments must be set down the following facts: (1) The Riggeda mentions men who go to the ocean (samudra) eager for gain (I. 56 2: IV 55 6) and samudra cannot be explained away in these passages as standing for the very broad and wide stream of the lower Indus (2) There are some allusions to a trade more extensive than that implied by boats for crossing rivers (3) Verses I 116. 3 ff tell us that the Asvins rescued Phujvu in the ocean with a ship of a hundred pars (satāritra). A ship of this type could be needed only for a sea-voyage (4) X 136, 5 refers to "eastern and western oceans" These passages, in the opinion of the present writer, clearly indicate that sea-trade was carried on during this age.

3. Occupations and Industries

Some of the important professions and vocations of this period have been incidentally referred to above. The Brāhmaṇas or the priestly class dedicated themselves to the highly specialized occupation or profession of officiating at the sacrifices and preserving the sacred hymnology of the Aryans by conducting Vedic classes. The Kshatriya or Rājanya class had taken to the fighting profession. Members of the third—the Vaisya—class naturally took to agriculture, cattle-breeding and other pastoral pursuits, and the various arts, crafts, and industries. The lowest, the Sūdra class, was en-

SOCIAL AND ECONOMIC CONDITIONS

gaged in service of all kinds. But, as noted above, the classes were not irrevocably bound up with specific occupations. Many Rājanyas are found among the poets of the Rupveda, and members of the three higher classes were not rarely promiscuously engaged in cattlebreeding, during times of peace, and in fighting, during times of war. Money-lending was practised chiefly by the Vaisyas, but also occasionally by Brāhmanas.

It appears from the large number of similes and metaphors drawn from the art of fashioning chariots for war and race, and carts for agriculture and transport, that carpentry was an honoured profession, the carpenter being also a wheelwright and joiner. He did all sorts of work in wood, and even carved work of a finer type was not beyond his skill (X. 86, 5; I. 161, 9; III, 60, 2). The worker in metal smelted ore in the furnace using the wing of a bird as a bellows to fan the flames. Household utensils like kettles were made of metal (ayas). What metal the ayas was is uncertain. It may have been either copper, bronze, or iron, if we suppose that the word is consistently used in the same sense; but it is also possible that it is used in more senses than one. Its colour is to be inferred from the epithets used with it, such as "reddish" As the use of copper precedes that of iron in the development of civilization, ayas may have indicated "copper" or its alloy "bronze"; but this is by no means certain, and iron may have been known Earthenware and wooden vessels were used for purposes of eating and drinking, along with those of metal. The art of the tanner (charmamna in VIII 5, 38) and the use of hide are well known. Ox-hide was used to manufacture bowstrings, thongs (to fasten parts of the chariots), reins and the lash of the whip (VI. 75. 11; I. 121. 9; VI 47. 26; 46 14; 53 9, etc.) It was also placed above the boards on which the Soma was pressed with the stones. It is not unlikely that skin bags were also made with it (X. 106. 10). Among the home and cottage industries may be mentioned sewing, the plaiting of mats from grass or reeds, and the spinning and weaving of cloth, chiefly done by women Among the other professions may be mentioned those of the dancer, both male and female, barber (Vaptra) and vintner. It is noteworthy that those who practised these professions were not looked upon as inferiors in the age of the Rigveda.

Hunting as a sport and profession was known and must have professionals. Nets and pitfalls were the normal instruments of capture, and the bow and arrow was also employed. Birds were caught in nets, and antelopes (risya) in pits. There are some obscure references to the capture of boars and buffaloes (gaura) The lion was caught in traps. The Rigueda is an important source of our knowledge of hunting in early times. The butcher's profession was also probably known, as the services of a Samitri (in

the sense of "one who cuts up") were probably needed at animal sacrifices (I. 162, 9: II. 3, 10: III. 4, 10, etc.).

There is no distinct reference to the specific occupation of slaves. They probably assisted their Aryan masters who did not think it beneath their dignity to practise all the arts and crafts needed by society.

4. House-Building and Means of Transport

Although it is suggested that some kind of a distinction between villages and towns is indicated in I. 44. 10 and 114. 1, city-life is not much in evidence. The village was a group of houses, built near each other for purposes of safety, and was surrounded by some kind of a hedge as a protective barrier against enemies and wild beasts. It is difficult to determine the exact sense in the Rigveda of pur which later meant a town. It seems to have been an earthwork fortification, protected by a palisade or stone wall. The frequent mention of the capture or destruction of such strongholds indicates that they were numerous and scattered all over the country, and that they could be easily erected like the stockades made by primitive tribes all over the world The pur or earth-work fortification may either have been part of the village or just outside it, to be resorted to in times of emergency. It was called autumnal, probably because the emergency arose generally in autumn, when raids from neighbouring tribes became possible at the end of the monsoon, or the emergency was in the shape of a flooding of the plains owing to the rising of rivers in autumn.

Houses were made of wood, the beams (vanisa) being made of bamboo (also vanisa). The so-called strongholds or forts probably had a series of concentric walls.

The conception of Pūshan as the guardian of the pathways gives occasion for the numerous references of all kinds of transport and means of communication such as earts (anas) and chariots (ratha) on land and ships on the sea. The Aśvins are credited with ships (or conveyances) moving through the air (antaruksha), which come uncannily near the modern conception of airships.

The chariots and carts were drawn by oxen, mules, or horses. The chariots of the rich were drawn by two and sometimes even four horses. Riding on horseback was also much in vogue. Names of various parts of chariots occur very frequently in the RV hymns, and indicate a considerable improvement in their construction over the primitive types. Travelling was fairly common. Prayers are offered to the gods (VII. 35. 15) to "give broad paths to travel,"—paths that should be straight in direction and thornless (X. 85. 23). A solemn prayer to Indra for the safety of the journey (III. 53. 17-20) gives many interesting details of a cart driven by oxen in which the journey was made.

SOCIAL AND ECONOMIC CONDITIONS

The references to artificial waterways such as kulvā in III. 45. 3 and "khanitrimā āpaḥ" in VII. 49. 2 make it certain that some kind of an irrigation system was known. Wells artificially made are contrasted with springs. Such wells were covered, and are described as unfailing and full of water. The water was raised by a wheel to which a strap with a pail attached to it was fastened. These wells could be used for irrigation purposes, when the water was led off into broad channels (RV, I, 55 8; X, 101, 6, 7: 102, 11: VIII. 69, 12: 72, 10).

¹ There is a voluminous literature on the origin and antiquity of the Caste System in India, to some of which reference will be made in the bibliography. For the many control of the caste is a state of the state o

BOOK SIX THE AGE OF THE LATER SAMHITAS

CHAPTER XX

LANGUAGE AND LITERATURE

1 LANGUAGE OF THE SAMHITAS

1. Sāmaveda

A language ceases to change only after death, and so the language of the Riggeda, even though hieratic and therefore to some extent artificial, did change in so far as it was a form of living speech at the same time The earliest traceable stage in its course of change is that marked by the variant readings of the Mantras of the Rigveda contained in the Samaveda. In many cases these Samaveda-variants show forms which, however, seem to be archaic in comparison with the corresponding forms in the parallel Rik-mantras, and therefore it was argued, particularly by Ludwig, that, at least in some cases, the Samavedic readings should be regarded as retaining the original text. But the question is, whether these apparently archaic forms were not the result of conscious efforts on the part of the redactors of the Samaveda to strike an archaic effect.2 Almost all such forms in Samavedic parallel passages occur elsewhere also in the Rigueda, and none of them needs to have been derived from a pre-Rigvedic stage of the language. Without entirely denying the possibility of an original reading having been retained in some cases only in the Samaveda, it is only fair to conclude therefore that there is no compelling reason to consider the Samavedic text-tradition as superior to that of the Rigveda, specially as, even according to Ludwig's notion,2 the instances of older forms are more numerous in the text of the Rigveda.

Moreover, the older forms in the passages of the Rigveda are on the whole not at all such as might have been planted in the text with a view to artificially producing an archaic effect, though that may be held of some of the older forms appearing in the Samavedic readings. Thus vakshatu in SV, II. 9. 1. 16. 3 (=. No. 1809) is indeed of older stock than yachchhatu in the parallel passage RV, VIII. 34, 2. But it would be wrong to conclude therefrom that the Samaveda in this case represents the older and perhaps the original reading, for such a view of the situation cannot but lead to the absurd position of considering all the Rigvedic passages containing forms like vakshatu to be older than all the Rigvedic passages containing forms like uachchhatu. In fact, the sporadical occurrence of particular late forms cannot prove the lateness of the texts containing them, be those texts Rigvedic or Samavedic, for early and late forms of nearly all categories have been used side by side in every period of the age of the Samhitas. A real change in the linguistic

habits of the speakers concerned can be postulated only when the instances of variation point to a general tendency. Such general tendencies can, however, be clearly perceived in the variant readings of the Samaveda, and they point invariably to a later stage of development. Thus the archaic genitive singular feminine form avyah has been in all cases changed into avyah in the Samavedic variants. The enclitic particle im of pronominal origin which was visibly going out of use already in the Rigvedic language, occurs also in some passages of the Samaveda, but it is significant that in some others the reading has been so altered as to eliminate it; thus abhim ritasya of RV appears as abhy ritasya in SV, payasem as payased, utem (=uta im) as ūtim. Similarly, there is a pronounced tendency in the Samavedic variants to eliminate dissyllabic vowels as a result of which Rigyedic akshar and prah had to become aksharat and paprah in the Samaveda. The archaic absolutive ending -tvi occurs only in two of the Rik-verses repeated in the Samaveda, but in both this -tvi has been changed into -tva. Accented i does not in Sandhi change into y (in spite of graphic forms) in the first nine Mandalas of the Riggeda, but it does in the Samaveda. In consequence, ví asema deváhitam (RV.I. 89 8) had to become vy àsemahi deválutam (SV. II. 9. 3. 9. 2. - No 1874) in which the loss of a vowel through Sandhi had to be made up for by replacing asema through later asemahi that does not at all occur in the Rigveda.4

2. Yajurveda

Next to the Samhitas of the Rigveda and the Samaveda are to be ranked, from the linguistic point of view, in chronological order, the Mantra-portions of the Black Yajurveda, which in their turn are clearly older than the Väjasaneyi-Sainhitä which should perhaps be dated earlier than the Atharvaveda. 6 Regarding the language of the Mantra-portions of the Taittiriua-Samhita, Keith has shown6 that it represents a stage intermediate between the Rigvedic language and the language of the Brahmanas, though resembling the former much more closely than the latter. The same may be said also of the language of the other three Samhitas of the Black Yajurveda, for linguistically the Mantra-portions of all the four schools are really homogeneous, and therefore must be assigned to approximately the same age. Without making proper distinction between Mantra and Brahmana portions, Schroeder tried to prove the superior age of the Maitrayani Samhita on linguistic grounds.7 but his arguments are unconvincing. The fact that the root stighof Indo-European antiquity occurs in Indian literature only in the Maitrayani-Samhita cannot of course prove the antiquity of the Maitrayani-Samhita itself. Nor can the other peculiarities of the language of the Maitrayava and the Kathaka pointed out by Schroeder be accepted as proof of greater antiquity. The root khuā- ap-

pears in the curious form ksa- in Maitrayani, Kathaka and Kapishthala, but that is no sign of antiquity as Schroeder was inclined to believe. It simply shows that in the dialects represented by these texts the semi-vowel y in khyā- became spirantic in pronunciation. and as such it points rather to a comparatively later age. Similarly, these three show the form playate for Taittiriya prayate which is certainly older. The periphrastic verb-forms utsādayām akar, prajanayam akar and pavayam kuryat, specifically mentioned by Paninis as characteristic of the Vedic language, actually occur in the Maitrouani, but cannot prove it to be older than the Taittiriua, for the formation is not a primary one, as Keith9 has justly pointed out. In microscopic details little differences can no doubt be observed in the four known Samhitas of the Black Yajurveda, but the general structure of their language is absolutely the same 10 Equally extreme rarity of narrative perfects in all the Samhitas of the Black Yajurveda11 is not only an additional proof of their essential contemporaneity, but also assigns them chronologically to the oldest period of the Vedic prose. In fact, in this respect the language of the Black Yajurveda is distinctly more faithful to the Indo-European basic idiom than the language of the Rigveda itself, for the narrative perfect, certainly not of Indo-European origin, is much more in evidence in the latter. 12

The Mantra portions of the Taittiriya-Samhita, that are independent of the Rigueda, mark a stage of distinct advance towards the normal language of the Brahmanas. Thus -ebhih for -aih, -a for -ena, -āsah for -āh and -ā for āni are steadily diminishing in the Mantra-portions (and completely disappear from the Brahmana parts). 13 Similarly, the verb in the independent Mantra-parts of the Taittiriva-Samhitā shows a definite tendency to eliminate the Rigvedic endings -masi, -thana and -tana. The future is a rarity in the Rioveda, but it is common in the Taittiriva and there is perhaps even an instance of periphrastic future (lut), namely anvagantā. 13a While the later gerundives in -tavya and -anīya do not yet occur in the Taittiriya-mantras, the older ones in -ayya and -tva have almost completely disappeared in them. Lastly may be mentioned as occurring in Taittiriva-mantra the much discussed but still unexplained verb-forms dhvanayit and ajayit. 14 As for the Väjasanevi-Samhitä of the White Yajurveda, even its oldest parts (Adhyāyas I-XVIII) are certainly later than the Mantra-portions of the Taittiriya. In the treatment of Rigvedic Mantras it shows much less independence than the Black Yajurveda and conforms much more to the Rigvedic text-tradition. As a result, the Kanva school of the Vajasanevins has adopted the peculiarly Rigyedic sound I for intervocalic d also in its own Samhita. In language, the Vajasaneyi-Samhita does not differ from the Brahmanas. 14a

3. Atharvaveda

A linguistic appraisal of the Atharvaveda is unusually difficult, for very old things have been described in it sometimes in very late language, but at the same time it also offers forms that would be regarded as archaic even in the Riggeda. This can perhaps be best explained on the assumption that though no less old than the Rigueda in contents, the Atharvaveda was codified and canonized so late that the redactors considered it necessary to re-dress it in an artificial garb of hieratic solemnity. At any rate, it is clear that the reductors of the Atharvaveda had inherited a long tradition of Mantra literature of which all the parts seemed to them to be equally old, and which, therefore, they used indiscriminately in dressing up the Atharvan text. The basic language of the Atharvaveda is, however, not too unlike, say, the Sanskrit of the grammarian Patanjali, and is on the whole not difficult to understand, excepting where the text consists of purely magical incantations, which the authors, as is everywhere the case with similar compositions, intentionally tried to make obscure

About one-seventh of the material of the first nineteen of the twenty Kändas of the Atharvaveda is drawn from the Rigueda. and in these Kandas Rik-mantras often appear with significant variants. The twentieth Kanda, the Samhita of the Brahmanachchhamsin as we have called it, consists, however, wholly of Mantras drawn from the Riggeda which appear here without a single variant reading, and among them are contained also Mantras from Vālakhilva-hymns, as, for instance, the first two of the four verses of AV, XX, 51 are identical with Val I 1-2, and the second two with Val II 1-2.15 However interesting in other respects, the twentieth Kanda is therefore quite valueless from the linguistic point of view Linguistically interesting and important are only those Rik-mantras (drawn mostly from the tenth Mandala) which are scattered in the other Kandas, for in them a general trend towards the later language is distinctly perceptible. Thus the later absolutive ending -tvā often replaces Rigyedic -tvāya or -tvī (e.g. hitrā for Rigvedic hitrāya and bhūtvā for Rigvedic bhūtvī). Forms of instrumental plural in -ebhih and -ath are equally current in the Rigveda, but in the Atharraveda, against 263 cases of -aih there are only 53 of -ebhih 10 The root grabh- becomes grah- in the Atharvaveda when followed by suffixal -n-, thus producing forms such as grihnāmi (for Rigvedic gribhnāmi) that are the only forms current in later Sanskrit. The word syona is always trisyllabic in the Rigveda, but in the Atharvaveda it is in most cases dissyllabic as in the later language. The Rigvedic form panthah in nominative plural gives way in the Atharvaveda to the classical form panthough on the analogy of adhvanah (from adhvan), and it is remark-

able that in AV, XIV, 1, 34a (=RV, X, 85, 23a) panthah has been replaced by panthanch even to the detriment of metre 19 But it is not in the variants of Rik-mantras alone that the late character of the language of the Atharvaveda is revealed. The vocative singular masculine of stems in -vams always ends with -vah in the Rigueda (e.g., chikitvah from chikitvāms-), but in the Atharvaveda it already assumes the classical form in -van (e.g., chikitvan); and the vocative singular masculine of vant-stems is almost always in -vah in the Rigveda, but in the independent passages of the Atharvaveda it is always in -van.20 as in later literature. As instances of Atharvavedic innovations in verbal flexion may be mentioned that in the Rigveda the subjunctive middle ending in the second person singular is -ase, (eg. vardhase), but in the Atharvaveda it is -asai (e.g., nayāsai) as also in the Brahmanas, similarly the parallel ending in the third person singular is -ate in the Rigveda excepting in one form, but in the Atharvaveda and later it is exclusively -atai (e.g., śrayāte in RV, but śrauātai in AV) ?1 The only instance of periphrastic perfect in the Mantra-texts's is gamayam chakara in AV, XVIII. 2. 27, and the earliest occurrence of periphrastic future?3 is to be found perhaps in the form anvaganta??4 in AV, VI 123. 1-2. And again it is the Atharvaveda and no other Mantra-text that contains gerundives in -tarya and -aniya, e.g., huisitarya (AV, V 18. 6) and amantraniya (AV, VIII. 10. 7).24

These are the more important features of the Atharvavedic language that stamp it definitely as the latest of the Mantra-texts linguistically, and the metrical and non-metrical parts of the Atharvaveda are composed in apparently the same language? At the same time, however, some of the words specially characteristic of the Atharvaveda, such as hvayāmi, sarva (as compared with viśva), raijū, etc. are of prehistoric origin? and therefore would seem to argue for it a very high antiquity

2 THE SAMHITA LITERATURE

1. Atharvaveda

From the view-point of contents, there can be no doubt that the typically Atharvanic charms and incantations are the product of a primitive culture not far removed from the dawn of human civilization Mantras of this type are not altogether wanting in the Rigiveda, but, being essentially a Srauta Mantrapatha for priests whose chief concern was the cultivation of Soma ritual it could not include many of them, since the whole Soma ritual was strictly hieratic. The Mantras of the Atharvaveda on the other hand were meant for application at the humbler Grihya sacrifices of the common people evolved round the plain and simple primitive fire-cult. But the priestly classes, in course of time, got the control of the originally non-

Brahmanical Grihya sacrifices, and, naturally, also compiled a Mantrapățha for these. This Grihya Mantrapățha is the Athervaveda.

The Srauta Mantrapsiha, i e., the Riqueda, was compiled by the priests for the priests, and partly for their social superiors, the princes and potentates. The tone of the Riqueda, therefore, even where the Mantras are not directly addressed to the gods, is mainly one of begging and persuading. But the tone of the Atharvaveda is altogether different. Here the Brähmana priest is addressing his social inferiors from whom he need not turn off the shady side of his character. Thus in the hymn on the "Brähmana's wife" (Brahmajāyā) the priest has demanded a remarkable privilege for his class (AV, V. 17. 8):

Even though there were ten non-Brāhmaṇa previous husbands of a woman.

The Brāhmaṇa alone becomes her husband if he seizes her hand 27

It is significant that the verses immediately preceding and following this verse occur also in the Paippalāda-Samhītā, and seven of the verses of this hymn constitute the Rigvedic original (X. 109) of which it is an expanded version. But this particular verse, planted in the hymn to serve an obvious purpose, occurs neither in the Rigveda nor in the Paippalāda The point has been still further emphasized in the following verse (AV, V. 17. 9):

The Brāhmaṇa indeed is the husband, neither the Rājanya, nor the Vaiśva.

This the sun goes on proclaiming to the five tribes of men. The burden of the other verses of this notorious hymn is, however, not the Brähmæna's preposterous claim to other men's wives, but threats and curses on those who would dare to molest the Brähmana's wife, e.g. (verse 12):—

Not on his couch reclines a wife bringing a hundred (as dowry?) In whose kingdom the Brāhmaṇa's wife is restrained through ignorance.

Not only the Brāhmaṇa's wife, but also his property was sought to be protected by a similar appeal to people's superstition.²⁸ Thus in the next hymn (AV, V. 18) we are told (vv. 9-10):—

Brāhmaṇas have sharp arrows and missiles, the volley they hurl is not in vain; Pursuing with fervour and with fury they cast him down from afar. They that ruled a thousand and were ten thousands,— Those Vaitahavyas were defeated for having devoured a Brāhmana's cow.

But the trick becomes ridiculous when it is suggested in all seriousness as a way of averting the ill omen of a twinning animal, that one of the twin calves should be made over to a Brāhmaṇa (AV, III. 28. 2). Most amusing, however, is the long hymn (AV, XII. 4) in fierce denunciation of those who fail to bestow on Brāhmaṇas their barren cows.

The Brähmana's supposed privileges have thus been shamelessly asserted in the Atharvaveda, and of his obligations there is hardly
any mention Thus in AV, III. 58 the Brähmana, it is true, is
praying for glory instead of wealth, but he cannot help adding:
"so that I may be dear to the bestower of Dakshirá (sacrificial fee)."
To the Brähmanas of the Atharvaveda it was evidently more important to be dear to the bestower of Dakshirá than to be dear to the
gods. Nor were the Mantras of the Atharvaveda primarily meant
for those sacrificial sessions (sattras) at which there was neither
Yafamāna nor Dakshirá.

The community in which the Atharvan priest ordinarily moved was no doubt the society of the poor and ignorant villagers, to meet the demands of whose primitive superstitions was his principal professional business. But as even the highest and the mighty in the land were not above those superstitions, the Atharvan gained access even to the rulers of the country, and in fact came to be recognized as the king's alter ego in the rôle of his Purohita. How the Atharvan alone of the various types of priests came to occupy this enviable position is quite clear. While the other priests were adepts in the higher Srauta-ritual of which the solemn ceremonies were performed only at intervals or on special occasions, the Atharvan had to advise the king on trivial events of his daily life, such as a cough (AV, VI. 105), sleep (AV, IV. 5), nightmare (AV, VI. 45), etc., and therefore had to be constantly in attendance on him.29 Who else in these circumstances could be the king's chief adviser? Moreover, were not the king's victories due to the effective prayers of his Purohita? A king's Purohita actually says in the Atharvaveda (III. 19):-

- Sharpened is this prayer of mine, sharpened is my manly strength; Sharp and imperishable be their rule whose victorious Purohita I am.
- Sharper than the axe, and sharper than the flame, Sharper than the thunder of Indra are those whose Purchita I am.

Since an Atharvan priest was by custom the king's Purohita it is but natural that an elaborate hymn of coronation at which, also

according to later ritual, the Purohita was the chief functionary-should be included in the Atharvaveda (IV. 8);---

Being sets milk in beings,

he has become the lord of beings,

Death attends his coronation, let this king accept this royalty.

2. Stride forward, do not falter (?)

stern corrector, rival-slayer Approach, O benefactor of friends,

may you be blessed by the gods.

The hymn also refers to the custom of treading on a tiger-skin at coronation:—

4. As a tiger on tiger-skin

stride unto the great quarters;

Let all the people and heavenly waters rich in milk desire you

There is also a similar hymn intended for recital at the election of a king (AV, III 4).—

1 To you has come the kingdom, with splendour rise forward.

as lord of the people, sole king, rule,

Let all the quarters call you. O king, may all wait on you and pay you homage

Let the people choose you for kingship.

let these five divine quarters (choose you):

Rest at the summit and pinnacle of your kingdom,

and from there share out riches to us.

That the king had sometimes to be elected, though kingship was generally hereditary, is clearly suggested by the last verse. The exact form of government, however, cannot be ascertained from the Mantras of the Atharvaveda But that the people were happy and proud of their motherland is perfectly clear from the splendid Bhūmi-sūkta (AV, XII. 1) which might have been the national authem of Vede India*0:—

- 1 Truth supreme and right formidable, consecration and penance, holiness and sacrifice are sustaining the earth; May she, the mistress of all that was and will be, the earth, make for us extensive space.
- 2 (She who ordains) freedom from restraint among men, whose are the hills and streams equally numerous (?) Who hears herbs of various virtues—

may she, the earth, spread and prosper for us.

3 On whom are the ocean and the river and the waters, on whom have sprung food and the peoples. On whom quickens this that breathes and stirs may that earth grant us cattle and also food

She who in the beginning was water in the ocean, whom the sages followed (?) by means of occult power, The earth, whose deathless heart, encompassed in truth, rests in highest heaven-

may she confer glory and strength on our excellent state.

11. Let your hills and snowy mountains and your forest be pleasant. O earth!

On the earth, brown, black, red, and multiform, firm and extended, by Indra defended,

I have stood unconquered, unsmitten, uninjured.

12. What is your middle, O earth, what your navel,

what refreshments arose out of your body, Instal us in them and be towards us gracious:

Earth is the mother, and I am her son,

Parjanya is the father, may he grant us plenty. 45. May the earth bearing peoples of various speeches

and of customs varying according to their homes, Grant me wealth in a thousand streams

like a steadfast and unresisting milch-cow 56. What villages, what forests,

what assemblies are on the earth.

What congregations and councils.

there may we speak in praise of you 31 The hymn runs up to sixty-three verses, and at the end, the poet, dissolving in rapture and gratitude, pours out his heart in these

simple words.-63 O mother earth, settle me down

and kindly make me well-established.

In concord with heaven, O sage,

settle me in splendour and glory

A number of hymns of the Atharvaveda are on the borderline of magic and politics.32 As example may be cited AV, VII 12:-

1. May the assembly and the council32a protect me,

the two daughters of Prajapati in agreement; May he whom I meet seek to help me.

may I speak pleasantly at the meeting. O fathers:

Of these seated here together

I take away splendour and discernment:

Of this whole gathering, O Indra,

make me the possessor of fortune Of the same type, but much more elevated in tone, is the oft-quoted and justly celebrated charm for securing concord (AV III 30) --

1. Like in heart, of like intent non-hostile do I make you;

One another you should love.

as the cow loves her new-born calf.

- May the son do the father's will and be of one mind with his mother, May wife to husband honeyed words
 - and peaceful always speak.

 May not brother his brother hate.
 - or sister her own sister;
 - In full accord, with duty same, should they speak words gently.
- Same be your drink and common your food, to the same yoke together I bind you, Worship Agni together in harmony

Worship Agni together in harmony like spokes round the nave of a wheel.

Far more numerous are, however, the charms of a homelier sort. "House and home, field and river, grain and ram, cattle and horses, trading and gambling, journeying and returning, serpents and vermin, furnish the special themes for these prayers and charms." ¹³ Thus AV, I. 13 is a charm to conciliate the goddess of lightning:—

- Homage be to your lightning, homage to your thunder, Homage to your bolt which you hurl at the wicked.
- 2. Homage to you, child of stream, from which you gather heat:

Take pity on our bodies, and to our children be kind.

Protection against fire is supposed to be achieved by means of the charm (AV, III. 21) which begins thus—

Fires that are in the waters.

in Vritra, in man, and in stones,

Who have entered the plants and the trees,

to those fires be this oblation

Abundance of grain is secured by means of the charm AV, III. 24:-

- 4. As a fountain of a hundred jets,
 - of a thousand jets, unexhausted, So is this our grain

of a thousand jets, unexhausted.

5. Collect, O with hundred hands.

pile, O with thousand hands;

Bring about the amplitude here of what was and will be done.

This charm was applied evidently at the time of gathering corn. The charm for sowing seed is AV, VI. 142:—

- Shoot up and multiply by your own strength, O barley, Fill (?) all the vessels, may not heavenly thunder destroy you.
- Where we appeal to you, the divine barley that listens to us, There shoot up like the sky, be unexhausted like the ocean.

 Unexhausted are your attendants (?), unexhausted be your heaps.

Unexhausted those who give you, and also those whom you consume.

Very curious are the so-called Mṛigāra-sūktas (AV. IV. 23-29), the first and last verses of each of which occur also in the Black Yajurve-da³4 in connection with a Mṛigāreshṭṭ, of which these are obviously a further elaboration. Each of these hymns (they cannot be called magical charms, though they are used as such) is addressed to a separate deity, and every verse of each of them ends with the refrain: "let him (or do ye) free us from distress." Rudra has been invoked in a long hymn (XI. 2), and as is usual in prayers to this god, has not been asked to confer boons, but only not to injure. The various names applied to the god in this hymn naturally call to mind the Satarudriya.³⁴

Least savoury of the magic charms of the Atharvaveda are those of witchcraft (abhichāra) and the like which constitute the Angiras part of the Samhitā. The purpose of some is defensive, but the majority of them are offensive in purpose and directed against human enemies. Evil spirits are firstly called upon to come out in the open and proclaim their read character, for, as soon as they do that, they lose their dangerous power of doing injury. The metal most effective against the demons is lead, which therefore plays a prominent part in these hymns.

Low and primitive morality speaks in these hymns. But there are also hymns pregnant with noble sentiments. For instance, the famous hymn³⁵ to Varuna (AV, IV. 16):—

- The mighty lord on high our deeds, as if at hand, espies;
 The gods know all men do, though men would fain their acts disguise.
- Whoever stands, whoever moves, or steals from place to place, Or hides him in his secret cell—the gods his movements trace. Wherever two together plot, and deem they are alone,
 - King Varuna is there, a third, and all their schemes are known.
- This earth is his, to him belong these vast and boundless skies;
 Both seas within him rest, and yet in that small pool he lies.
 Whoever far beyond the sky should think his way to wing.
- He could not there elude the grasp of Varupa the king. His spies, descending from the skies, glide all this world around:
 - Their thousand eyes all-scanning sweep to earth's remotest hound
- Whate'er exists in heaven and earth, what'er beyond the skies, Before the eyes of Varuna, the king, unfolded lies.

The ceaseless winkings all he counts of every mortal's cyes, He wields this universal frame as gamester throws his dice Atharvavedic poetry has reached its peak in this hymn. But to gain a true view of the Atharvaveda, the other side of the picture should not only not be ignored, but should rather be kept more in mind. Thus there are two imprecations (VII. 95. 96) directed against the kidneys of an enemy. The purpose of the hymn VII. 70 is to frustrate the enemy's sacrifice, as is disclosed by its very first verse:—

Whatever that one offers with mind, speech, sacrifice, oblation and Yajus—

That offering of his let Nirriti in concord with death destroy before it has taken place.

Most typical of the hymns of this genre are perhaps those with the refrain "he who hates us, whom we hate" (e.g., AV. II. 19-23) Along with charms for victory, longevity, cure from fever, etc., we find also charms for winning the heart of a maid, e.g., AV, II 30—

- 1 As the wind shakes the grass Sc I shake your mind, So that you may desire me, That you may not go away 4 What was within, be that out,
 - What was withm, be that out. What was out. be within; Of the maids of every sort Seize the mind, O herb.

That magical charms of this sort were not applied exclusively in connection with extra-conjugal love is, however, clear from a similar charm (VII. 37) put in the mouth of a newly married bride who admonishes her groom with these words (accompanied by corresponding act):—

With my garment produced by Manu do I surround you, So that you be mine alone, and never even discourse of other women

This tyrannical passion has been aptly likened by another poet in the Atharvaveda (III. 25 2) to "an arrow, winged with longing, barbed with love, and whose shaft is unswerving desire" (Bloomfield)

Quite a number of medicinal charms are included in the Atharrareda. The chief malady that was sought to be treated magically is 'alkman (this term does not occur outside of the Atharvaveda). From the symptoms described it is almost certain that it was nothing but malarial fever The plant Kushtha is mentioned as potent in fighting takman but whether as medicine, or as amulet, is not quite clear It is interesting to note that in one hymn (V. 22) takman has been asked to seize the Sūdrā and the Dāsi or to go away to the Mūjavants or "to the Valhikas further beyond," and in the last verse the author says quite maliciously that he is sending takman

to the Gandharis, Angas and Magadhas 'like one sending a treasure to a person." That the Atharvaveua should contain charms against snake-bite is quite obvious. One of them (V. 13) deserves special mention not only as marking perhaps the lowest bathos of Atharvavedic witcheraft but also on account of the word tabuva occurring in its tenth verse:—

Not tābuva, not tābuva, yes you are tābuva;

The poison is made sapless by tabura:30

The word tābuva of this verse was connected with 'taboo' by Weber, though not without hesitation, and in the same hesitating manner the etymological equation tābuva = 'taboo' continues to be accepted or rejected to the present day. "La

Of isolated typical hymns of the Atharvaveda, mention should be made of the one (XI 5) in mystic exaltation of the Brahmacharin, from which it is quite clear that the institution of Brahmacharya as described in the later Grihva-sutras was fully established already in the age of the Atharvaveda. Similar mystic exaltation, in typical Brahmana-prose, of the Vratva (i.e. new convert to Brahmanism) is the theme of the entire fifteenth Kanda, in the fifth Parvava of which Rudra under various designations (Sarva, Bhava, Isana, Paśupati, Mahadeva) has been mentioned as guarding the various quarters for the Vratya Remarriage of widows is taken for granted (vv. 27-28) in the long hymn (AV, IX 5) on the expiatory power of the offering of Panchaudana (1 e, a goat and five ricedishes). The two hymns, V. 20 and 21, are the most important battle-charms in the Atharvaveda, and they might have been used also directly as battle-songs Regarding the apocryphal Kuntapasūktas, it should be noted that Parīkshit, probably of the Kurudynasty, has been mentioned in the first of them39 as a king in whose kingdom the people were prosperous. From the literary point of view the most interesting is the seventh Kuntapa which is nothing but a Vedic nursery-song with the refrain "not there is that, O maid, where you think,"

2. Yanu veda

As for the Yajurveda, the Sainhitā portion appears in an extended form in the latest of the Yajurveda-Sainhitās, viz., the Vājusnneyi-Sainhitā, of which only the earlier parts. in practically the same form and language. 40 but not necessarily in the same order, appear in the Sainhitās of the Black Yajurveda 41 From the view-point of literature and contents, therefore, a survey of the Vājusaneyi-Sainhitā, as given by Winternitz, 40 suffices for the Mantraparts of the whole Yajurveda. A fresh survey of the same literature need not be attempted here, especially as the ultimate literary value of the Yajus-mantras is nil Yet it may be mentioned in passing that in the Satarudriva section (Adhyāva XVI) of the Vājū-nassing that in the Satarudriva section (Adhyāva XVI) of the Vājū-

saneyi-Sanhitā the terrible god has been invoked under various designations, the result, no doubt, of the aversion to uttering directly his real name that can be perceived already in the Atharvaveda. The most interesting, however, is the section on Purushamedhas (Adhyāya XXXX), where, in the language of ritual symbolism, the various then existing classes and castes have been mentioned, which, according to Weber, ⁴³ point to a period of unrest and turmoll.

3. THE BRAHMANAS

1. Language

The Brāhmaṇa literature is vast and varied, but also dry and repulsive, excepting where, leaving their proper subject which is mystical and puerile speculation on ritual practices, the Brāhmaṇa authors cite illustrative examples from social life, invent aetiological myths to serve as the basic principle to all imaginable concrete facts, or simply narrate mythological or semi-historical stories, sometimes in the form of ballads. ¹⁴ The prolixity of the Brāhmaṇa-authors is sickening, and yet the texts are not at all perspicuous, in spite of their huge bulk in some cases. But the language with its even rhythm is not without a beauty of its own, strangely like that of the early canonical texts in Pāli. The Satapatha-Brāhmaṇa and the Jaimninga-Brāhmaṇa, however, show a fully developed literary style. This is important, for it is much more difficult to develop a literary style in free prose than in verse, and is possible only after considerable literary culture.

The Brahmana texts, together with the prose parts of the Atharvaveda and the Yajurveda, are perhaps "the only genuine prose works which the Sanskrit, as a popular language, has pro-Broadly speaking, the language of the Brahmanas is homogeneous. At the same time, however, every one of the older Brāhmana texts has its own minute linguistic peculiarities. Pānini's grammar offers a unique criterion by which to judge them. It cannot be proved that Panini was acquainted with the Samhita or the Brāhmanas of the White Yajurveda,46 though he certainly knew all the other Samhitä-texts known to us, as well as the Aitareva-Brāhmana.47 Now, to explain this curious fact it cannot be reasonably argued-as is often done-that though the White Yajurveda was considerably older, yet Pānini had no personal knowledge of it for the good reason that it was produced in eastern India; for Pānini certainly knew the Taittirīya-Samhitā, a product of the south. and the Maitrayani-Samhita, a product of the west, though he himself was at home in the north. His apparent ignorance of the White Yajurveda therefore must be regarded as a proof of the latter's comparatively late origin. But it also proves that for a composite picture of the language48 of the Brahmanas one may confidently

appeal to Pāṇṇni. For details, however, which prove the older Brāhmaņas to be much older than Pāṇini, special studies are necessarv.

Nothing is more characteristic of Brahmana prose than the substitution of the ending at for ah, both in ablative and genitive singular of feminine stems (e.g., bhūmyai for bhūmyāh). Forms in this anomalous -ai occur already in the prose parts of the Atharvaveda, but oftener in the Mantras of the Yajurveda, and very frequently in the Brahmanas. In the Jaiminiya-Brahmana, this -ai has even completely supplanted the usual -ah.43 but it does not occur at all in the Satapatha-Brahmana of the Kanva-recension. 60 The an-stems are very often endingless in locative singular in the Rigveda, and not a few times also in the Atharvaveda, but in Brahmana prose ahan and atman51 are the only two endingless locatives in living use 52 In its verbal system, too, the language of the Brāhmanas is in many respects sharply distinguished from that of the Mantra-texts The loss of augment is here restricted practically to prohibitive constructions with mā, as in the classical language, 3 and the so-called injunctive too is found in Brahmana prose hardly ever except after this prohibitive mã 54 The subjunctive finds its place, not in narrative, but in direct speech.542 Faint traces of gerunds in -am can be found already in the Rigveda,50 but they are quite common in the Brahmanas, e and past active participles in -tavant, quite unknown in the Rigveda, but quite common in the later language, begin to appear furtively in them.⁵⁷ The suffix -uka with the meaning of a present participle is a marked characteristic of the language of the Brahmanas,"8 as also the infinitive in -toh in construction with isvara. 9 The use of rupam kri- in the sense of "to become" is a peculiar feature of Brahmana syntax 60

In the use of the tenses of the past the Brahmanas show much more precision than the Rigveda. The aorist is rarely used in them outside of direct speech, and in narration the tense of the past used in the Brahmanas is normally the imperfect, but not unoften also the perfect 61 The perfects with a heavy reduplication have regularly a present meaning, but other perfects are used as often or oftener also in narrative past, 610 and the frequency of this narrative perfect is rightly regarded as a sign of comparative lateness of the texts concerned.62 Pāṇini's rules about the tenses of the past are not applicable to Brahmana prose, but it is curious to note that of the few narrative perfects occurring in the Brahmanaportions of the Taittiriya-Samhita not a single one has been used to relate personal experience-so that in this respect at least they are fully in accord with Paninean grammar.63 The periphrastic perfect with kri- as auxiliary, of which the earliest occurrence in the Atharvaveda has been noted above, is fairly common in the Brah-

manas, but that with as- is extremely rare, and no form with $b\lambda\bar{a}$ can be quoted at all. 64 In this respect, too, the language of the Brāhmanas is in essential agreement with Pāṇini who permits only k_{71} -, though already Kātyāyana and Patanjali twisted the meaning of the relevant Sūtra of Pāṇini so as to include also $bh\bar{a}$ - and as- 65 On the whole, the language of the Brāhmanas is more precise in expression than that of the Mantra-texts, and as a living and forceful form of speech it is infinitely superior to the monstrous prose of the classical writers. 66

2. Literature

The literaure of which this language is the vehicle is, however, arid and dismal, and could have been the product of only a very primitive intelligence. And yet it was in the age of the later Brahmanas that the older Upanishads were composed, and Panini's peerless grammar-perhaps the highest product of ancient Indian scientific thought -- was written. It is clear that the intellect and mentality revealed by the extensive Brahmana texts was the monopoly of the cabalistic priests of the later Vedic age, and not a characteristic of the enlightened sections of the people. As "literature" the Brahmanas, digressive portions apart, may prove to be of interest only to students of abnormal psychology.6s At the risk of a little exaggeration it may perhaps be maintained that all that is noble and beautiful in Hinduism was foreshadowed already by the Rigveda, and all that is filthy and repulsive in it, by the Brahmanas. The morality of the Brahmana texts is no higher than that of primitive medicine-men. Thus in connection with the Mahavrata sacrifice most immoral and obscene acts are enjoined to be performed in the presence of pious spectators. 69 The grasping greed of the Brähmin. so much in evidence already in the Atharvaveda, has passed all bounds in the Brāhmanas. Here the Brāhmin coolly claims that in every dispute between a Brahmin and a non-Brahmin the judgment should be given in favour of the Brahmin.70 With a cheerful disregard of other people's interest a Brahmana author has declared that a murder is no murder if the victim is not a Brahmin!71 And another declares with the same cool confidence that the Sudra is yathākāmavadhya, i.e., one who can be killed at will. 72

Scarcely less repulsive than this mentality of the Brahmana authors is their sickening prolixity. Lack of logic they tried to compensate for by repeating ad neuseam the same insipid thought. Hence the inordinate bulk of some of the Brahmana texts. But when no reasonable limit is set to a book, it is bound to take in much that is irrelevant, and it is these irrelevant portions of the Brahmanas that are of interest from the view-point of literature. The true stuff of the Brahmanas is dismal. If in the ritual it is required to move a cup an inch from east to west, the Sraute-sūtras

will simply state that and nothing more. But a Brihmana is almost sure to spin out a whole paragraph in "elucidation" of this act that may very well be as follows: "The cup should be moved from east to west, because the sun moves from east to west. He who moves the cup from east to west moves, therefore, also the sun, and thus conquers the world of heaven It is moved an inch, because an inch is the twelfth part of a foot And the foot is a metre. The Jagati-metre has twelve syllables In that he moves the cup an inch which is the twelfth part of a foot, the therefore moves the metres." This sounds strange no doubt. But, all the same, this is the stuff of which the Brähmanas are made. Everything else that is found in the Brähmanas is, strictly speaking, irrelevant. 73

In these irrelevant portions, however, may be found pieces of truly literary composition, though never of a high order They are of various genres. Firstly, there are the Gathas or narrative verses, composed in a language more archaic than the average language of the Brahmanas, but less so than that of the Sainhitas,74 Then there are interesting legends like that of the Great Flood,75 but most of them are frankly aetiological Quite a number of beautiful stories are contained in the Brahmanas in which the gods indulge in pranks with the mortals much in the fashion of their Olympian compeers. 76 It is very characteristic of the Brahmana authors that sin is generally regarded by them as a physical defilement 77 But genuine devotion to truth is not wanting Thus when Aruna Aupavesi in his old age was asked by his relations to establish ritual fires and become an Ahitagni, he shuddered in horror and replied that he doesn't dare, for an Ahitagni has to control his speech and can never speak an untruth, since "worship, above all, is truthfulness." That by truth the Brahmana authors meant more than mere accuracy in speech is clearly suggested by the story of a dispute between mind and speech that was settled by Prajapati in favour of mind on the ground that speech is the messenger and imitator of the mind.79 As regards speech concrete, the Brahmanas clearly state that the speech of the country of the Kuru-Panchalas is the best 80 And abstract speech (nāman) has been connected with form (rūpa) in a Brahmana text81 quite in the manner of later philosophy. The daily performance of the five Mahayajñas (offerings to gods, to beings, to the Fathers, the study of the Veda, and charity), the corner-stone of orthodox Hindu sociology, has been enjoined for the first time in a Brahmana text 812 The doctrine of reward and retribution after death for good and evil done during lifetime is also mentioned clearly in the Brahmana texts. 92 but the doctrine of rebirth is conspicuous by its absence, though the possibility of re-death in the

world of the Fathers has been recognized already, 33 and further that during sleep life temporarily separates from the body, 31

If treatment of women is a criterion of civilization, then the civilization of the Brähmana texts can expect only an adverse verdict from posterity. In the Rigvedic age, the newly married wife used to be greeted with the words, "you should address the assembly as a commander,"85 but the Brähmana authors, after identifying the woman with Nirriti (i e. evil), so declare that "the woman, the Sudra, the dog, and the crow are falsehood (Anrita)."87 Marriage by purchase must have been common-if not the rulein the age of the Brahmanas, for in deprecation of a faithless wife a Brahmana text says: "she commits an act of falsehood who though purchased by her husband goes about with others "38 There was no question of women freely addressing assemblies in this age, for the same text89 lavs down that women should not attend meetings. In every respect the culture of the priestly classes was at its lowest ebb in the age of the Brahmanas But it was still alive though confined within a small coterie. The Upanishadic seers vitalized it again, but gave it an altogether different form

4 THE ARANYAKAS

The Arany-akus ("Forest-texts"), the concluding portions or appendices to, the Brahmapas are so called (it is generally supposed) because their contents are of so secret and uncampy a nature that they would spell danger if taught to the unimitated, and had therefore to be learn in the forest and not in the village. They are concerned neither with the performance nor with any explanation of the sacrifice, but with its mysticism and symbolism. They form a natural transition to the Upanishads, the oldest of which are either included in or appended to the Aranyakas, the line of demarcation being not always easy to draw. The Aranyakas, and Upanishads by themselves, and not the system of philosophy based on them. were originally called "Vedantar" (literally, the concluding portions of the Veda)—a title applicable to them in more senses than one as follows:—

(1) From the point of view of relative literary chronology, they stand at the end of the Veda. (2) As the most obstruse and mystical of the Sruti works, they were naturally taught to the pupil towards the close of the period of his apprenticeship with his Guru (3) They formed the end of the daily Vedic-recital.

As component (and concluding) parts of the Brāhmaņas, the Aranyakas (and some Upanishads) are found attached to as many Sākhās (Vedic schools) as the Brāhmaṇas belong to The Aitaveya Āranyaka is appended to the Aitaveya Brāhmaṇa of the RV. It consists of five books which are looked upon and designated as five separate Aranyakas. The first deals with the Soma sacrifice from

the ritual point of view. The second is intermixed with theosophical speculations on Prana and Purusha, and is Upanishadic in character, the last four chapters actually forming the Aitareya Upanishad. The third book contains allegorical and mystical meanings of the Samhită, Pada, and Krama texts (Pāthas). The last two books contain miscellaneous matter, such as Mahanamni verses and details about the Nishkevalya Sastra, to be recited in the Mahavrata, and are attributed to Aśvalāyana and Śaunaka-two Sūtra authors. The Sankhayana or Kaushitaki Aranyaka is the concluding portion of the Kaushītaki Brāhmana of the RV and agrees very closely with the Aitareya Aranyaka in its contents. It consists of fifteen chapters of which 3 to 6 constitute the long and important Kaushitaki Upanishad. In the Black Yajurveda, the Taittiriya Aranyaka is only a continuation of the Taittiring Brahmana. It consists of ten chapters or prapathal:as (commonly called Aranas), 7 to 9 constituting the important Taittiriva Upanishad The tenth chapter called Mahanārāyana Upanishad is a very late addition to the Aranyaka. In the White Yaiviveda the fourteenth book of the Satapatha Brahmana is in name only an Aranyaka-the Brihadaranyaka-the last six chapters of which constitute the celebrated Upanishad of that name and the major part of the so-called Aranuaka.

For the Samaveda, the only Aranyakas are the first Aranyakalike section of the Chhandogya Upanishad, which belongs probably to the Tāṇdya-Mahā-Brāhmaṇa and the Jaiminīya Upanishad Brāhmana which is nothing but an Aranyaka of the Jaiminiya or Talavakara school of the SV and comprises the well-known Kena (or Talavakāra) Upcnishad

It is not necessary to discuss here the contents of the Aranyakas. as the principal ideas contained in them will be dealt with in the chapter on religion and phylosophy (Ch. XXII)

```
1 Der Ruweda, Band III, p. 92
```

² See Oldenberg, Prolegomena p 274

Ibid , pp. 92-3

⁴ For further instance of evidently intentional alteration of Rigredic passages in the direction of later forms in the Samaveda, see Oldenberg, op cit, pp 277-81 the direction of later forms in the Samareaa, see Oldenberg, op cit, pp See Keith, HOS, XVIII, p. clxv
6 Op. cit., pp cxl ff
7 See has Mattragami Samh-tá, Vol I, pp. xiv-xviii and Vol II, pp viii-x
8, II, 1, 42

⁸ Opt Att 5 xev.
10 Ibid, p xevi
11 Ibid, p xevi
11 Ibid, p xevi
12 See Wackernage! Altindusche Grammatik. Vol I, p xxxi
13. See Keith. op cit, pp. cxi ff
13. See Keith. op cit, pp. cxi ff
13. See Keith. op cit, pp. cxi ff
13. See Keith. op cit, pp. cxi ff (see below)

^{14.} See Whitney, §§ 1048, 904b

¹⁴a The Mantra portions of the Yajurveda are devoid of literary value, and therefore will not be discussed further in this chapter For social and political history. however, these portions are very important and in that connection they will be discussed in other chapters.

The ten Kuntapa-süktas (regarded as Khilas) placed towards the end of the twentieth Kanda are curiously analogous to the Valakhilya-hymns of the

Rigueda, also placed towards the end of what was originally perhaps the final Mandala of the Rigueda.

Mangials of the Ripored.

18. A curious fact that seems to have escaped notice so far is that the last hymn of the Atheroseeds (XX, 143) consists of RV, IV, 44 (seven verses) followed by RV, IV, 57 3 and RV, IVII 57 3 (e. Val. IX. 3) Does it show that when the twentieth Kinda was put together the genutine Rik-senshitid was supposed to conclude with the Vallakility verse RV, VIII 57 3 which the final redactors of the result of the Richard veds might have been the last verse of its first half Was it the intention of the final redactors of the Atharvaveda in putting these two verses at the end to emphasize in their usual mystical manner that their work was now doubly complete?

- omplete?

 To See Oldenberg, Prolegomena, pp. 320 ff

 See Oldenberg, Prolegomena, pp. 320 ff

 See Oldenberg, Prolegomena, pp. 320

 See Ibid, pp 288, 301

 Il See Macdonell, Vedic Grammar, p 322

 Z. Macdonell, op cft, \$ 496

 Z. Macdonell, op cft, \$ 496

 Z. Macdonell, op cft, \$ 540

 Z. Macdonell, op cft, \$ 540 quite clear whether it has been used actually as a periphrastic future
- unte clear whether it has been used action, we appear to the Atharvareda has been given by Lamman, MOS. Vol. VIII. p. 1011
- 26. See Bloomfield, The Atharvaveda, p. 47. In rendering passages of the Atharvayeda I have, as far as possible, followed Whitney's translation, though it is wooden and purely etymological, for what-ever it may be in other lespects, it is at least literally correct Compare in this connection also AV, XII, 5 3 ff
- 20 Compare in the connection and NY, All, 3 3 in 2 it is probably due to this existed office of kings Purchita that the Atharvan priest, under the designation "Brahman." became the supteme supervisor also at the great Srauta-sacisfices of his noble patron, in consequence of which the Atharvaneda itself came to be known as the Brahmaveda Various scholars.
- have expressed various opinions as to the inter-relation between, or the identity of, the Atharvan, the Brahman, and the Purchita (see specially Bloomfeld, op cit, 4 34, and Vedte, Index under "Purchita" and Brahman). The theory augusted here scens, however, to offer the best explanation

 30 The grandeur and beauty of this A₂ yru has been completely destroyed by Whitney in his etymological translation
- Witthey in his etyniological translation. It have contained in the political connotation. I have provisionally accepted them here in the following senses: another assembly, samparism congregation (Whitney host), sumit a council.

 See Bloomfield, op. crt. § 54.
- 32a Sabha and Samue for the constitutional importance of which cf. pp. 357 433
- 363 Sounds ann Samme 10 March 2018 (1997) 18 Open 18 See Whitney-Lamman's preface to IV. 23: Bloomfield, op cit, p 82
 34 See Whitney-Lamman's preface to IV. 23: Bloomfield, op cit, p 82
 34 Tettriyn-Samhtid, IV. 5, Vajasaneya-Samhtid, XVI.
 35. The translation given here is taken from Muir's metrical rendering of the 35. The translation given here is taken from Muir's metrical much more constant of the original much more hymn which reproduces the spirit and meaning of the original much more accurately than Whitney's wooden and etymological translation.
- 36a See above, Ch. VIII pp 15? verse is the positive counterpart of ned (na id). 36a See above, Ch VIII, pp. 153.
- 37 It is characteristic of Atharvavedic loose thinking that in v. 18 of this hymn Brahmacharya has been recommended not only for women, but also for animals
- The Rigrede recognizes levirate, but remarrige of widows is not directly mentioned in it. Ci. Ch. XIX, p. 380
 See Vedic Inder under "Partisahit."

40. The linguistic differences discussed earlier in this chapter are not important enough to make out a case for distinct dialect for any one of the Samhitas of the Yajurveda.

See supra, Ch. XII.

42. HIL, I, pp. 171-87.

HIL, pp. 110-11.

Perhaps the best exposition of the Brahmana literature will be found in La loctrine du sacrifice dans les Brahmanas by Lévi and Die Weltanschauung der Brahmana-texts by Oldenberg

Eggeling, SEE, XII, p xxv

46. See Paul Thieme, Paints and the Veda, pp. 73-6, where previous literature on

this problem has been indicated 47 See Liebich's genial monograph Panini, ein Beitrag zur Kenntnis der indischen Literatur und Grammatik.

48. But not for syntax

No. DOI 103 103 SYMBN.

50. Wackernagel, Altudusche Grammatik, Vol. III, \$ 15d.

50. The Känva-Satapatha in this regard thus differs not only from the Madhyandina-Satapatha, but also from all the other Brähmsnas. See Caland, Introd to Kanva-Sata, p. 65

Again it is interesting to note regarding the Satapatha-Brahmana that the locative singular of n-stems "has nearly always the -i in the Kanva-recension, but is formed by the Madhyandinas nearly always without case sign " Caland,

op cit, p 38 52. Wackernagel, op cit, Vol III, § 145d

53. Whitney, § 587b 54 Whitney, § 563

- 54a Sec Keith, HOS, XXV, p 87. Whitney, \$ 995a
- 56. On this -am see particularly Renou, Mémoire de la Société Linguistique de Paris, tome XXIII, 1935, pp 359-92
- 57 Whitney, \$ 960 58 Whitney, \$ 1180.

59. Whitrey, \$ 984c. 60 Whitney, \ 268a This need not be surprising, for the original meaning of rapa was "assumed form" as in the Riqueda The literal meaning of rupam kri was thus "to assume a changed form," i.e. "to become."

- thus "to assume a changed form," ie "to become"

 1 See Delbruck, Altindische Tempuslehre, p. 128

 11. The different values of the perfect in Vedic literature have been thoroughly discussed by Renou in his La Valeur du Parfait, Paris, 1925 62 See Keith, HOS, XXV, p 86
- 63. See Keith, HOS, XVIII, p cliv, fn 1

64 See Whitney, § 1073

65 See Liebich, op cit, p 80 66 See also Keith, HOS, XVIII, p clvii

67 It should not be forgotten that until the nineteenth century Europe could not produce in the field of gramma; and philology anything that can bear com-parison with Panni's Ashiddhydi
88 I cannot but agree on this point with Leopold von Schröder (Indiens Literatur

und Cultur. p. 114)

69 See Keith RPVU, p 351. It should not be forgotten, however, that the Mahavrata was originally a popular folk-festival over which the Brahmins merely threw a mantle of ritual sanctity

70. Tasttirīva-Samlutā II 5 11 9.

 71 Satapatha-Brāhmana, XIII 3 5 3.
 72 Aitareya-Brāhmana, VII 29 4 It should not be forgotten however that in the rithdox Minimas-school of interpretation such passages are taken to be mere rhetorical exaggerations (Arthoxoda) That they really are exaggerated statements and must not be taken literally is quite obvious, though, strangely enough, most of the non-indian scholars have taken even such statements to be interally these of the non-industrial scholars have taken even such sacrification to be hearly true. Passages of like import are quite common also in the Manusmrit, but no-body has ever suggested that in the Suñga period the treatment prescribed by Manu was actually meted out to the Stdras. There is no reason to doubt that the Brähmuna-passages, like those about Brähmuns and Stdras referred to here, the Brahmana-passages, like those about Brahmans and budies in the mind of a man were mere Arthunddas from the very beginning But since the mind of a man were mere Arthunddas from the very beginning But since the mind of a man were mere Arthunddas from the very beginning But since the mind of a man were mere and the can be measured also by the exaggerations he is in the habit of making, these Arthavada-passages cannot be ignored in estimating the moral outlook of the Brahmana authors

- 73. The relevant portions, though devoud of literary value, are not without interest for social librory Thus from our hypothetuel Brithmann-passage it is possible to inder that the Brithmann authors thought that the sun moves from east owest, and that they knew that a Logati-pida consists of twelve syllables. A property of the control of the cont

- compositions contained in the Brahmshas within the space available aret, only a few of the salent features will be indicated For a fuller account, see Wister18 Setgestha-Brühmens, 1, 8 1.
 18 See, for instance, the slory of Saryata Manava and his daughter Sukanya in the
 Sattapatha-Brühmens, IV 1 5 2 This story appears also in the JammingeBrühmens, See Calland, Auszeichl pp 231-2, and my Collection of Fragments of Brähmens, See Calend, Ausscald pp 251-2, and ray Collection of Frage Lost Brähmens pp 25-2, and ray Collection of Frage Lost Brähmens pp 25-2, and ray Collection of Frage 18, and 18,

- 86 Martrayani-Samhita, I. 10 11 87 Satapatha-Brahmana, XIV 1 1 31
- 88 Maitráyanî-Samhitá, loc cit 89 Op cit, IV 7, 4 tasmát mināmsah sabhām minti na strinah

CHAPTER XXI

POLITICAL AND LEGAL INSTITUTIONS

1. POLITICAL THEORY

The lack of a spirit of inquiry into the rationale of social and political institutions is generally regarded as a singular characteristic of oriental civilization including the Indian. Thus an eminent scholar1 writes: "To the early Eastern mind, the fact that a thing existed was sufficient of itself to show its right to be. Thus was effectually excluded all possibility of inquiries as to the relative perfection, or justification for the existence of, de facto social and political institutions" But this view is not wholly accurate For the dim beginnings of speculation regarding the origin of kingship. the raison d'être of the state, the status and relation of different classes in society and the justification of the same, together with other cognate problems, can be clearly traced in the literature even of the early period with which we are dealing. Unfortunately, as this literature, our only source of information, is wholly sacerdotal in character, the theories and speculations are presented in a theological and metaphysical environment. It is, however, important to note, that instead of passively accepting whatever existed in state or society, there was an active effort to trace the origin of institutions and offer an explanation of how things came to be what they were It is a reasonable presumption that if the secular literature of the period had been preserved, we would have come across more rational theories based on logically grounded belief rather than on faith or dogma

The political theories are sometimes discussed in connection with the gods, whose thoughts and activities are, however, so much akin to those of men, that no great stretch of imagination is required to interpret the views as equally, or really, applying to human affairs. This is best illustrated by the fundamental question of the origin of kingship. This definitely forms a subject of speculation in the literature of this period, and the Brāhmaṇa texts anticipate writers on polity of a later period by clearly formulating the question, "how is it that the king who is one rules over so many subjects". There are various replies to this question, and it is interesting to note that they form the germs of the more elaborately propounded views of later times. The first in point of importance is the view put forth in the Aitareya Brāhmaṇa (I. 1. 14). It is said that the "gods and demons fought with one another, but the gods were defeated The gods said: It is because we have no king that the

demons defeat us, so let us elect a king.' They elected a king and through his help obtained complete victory over the demons.' As Dr. Beni Prasad has very rightly observed,² "here the kingship originates in military necessity and derives its validity from consent." Though appearing under the thin disguise of divine affairs, there can be hardly any doubt that it is a very rational view of the origin of kingship which prevailed among a class of political thinkers of the period.

A somewhat similar view appears in another garb in the same Attareya Brāhmava (VIII. 4. 12). The story is told with reference to Indra's kingshp. "The gods headed by Prajāpati said to orie another, 'this one is among the gods the most vigorous, the most strong, the most valuant, the most perfect who carries out best any work (to be done). Let us instal him in the kingship" Here, again, the kingship originates in election and common consent, based on the possession of the highest qualities by the chosen candidate

But side by side with these rational views we find also the theory of the divine origin of kingship, which figures so prominently in later political literature. The germ of this has been traced by some scholars3 even in the Rigveda (IV. 42), in the hymn attributed to the Pūru king Trasadasyu, who exclaims, "I am Indra, I am Varuna," and again, "on me (the gods) bestow those principal energies (that are) characteristic of the Asuras." But this may be explained as an expression of personal vanity rather than the formulation of a political theory. In the later Samhitas and the Brahmanas, however, the divinity of the king is put forth as a general doctrine. The king is declared to have gained identity with Praiapati by virtue of the Vajapeva and Rajasuva sacrifices 4 The Satapatha Brāhmana (V 3 3, 12) definitely declares: "He the Rajanya is the visible representative of Prajapati (the lord of creatures): hence while being one, he rules over many" The Taittiriua Brahmana (II 2. 10 1-2) tells the story how Indra, originally the most inferior among the gods, was created their king by Prajapati, and received from him both the royal symbol and lustre. This is another illustration of the application of secular ideas to the realm of gods. But although the king is raised to the rank of God, the human origin is not lost sight of, and he is never regarded as divine by virtue of hereditary descent 5

Reference may be made in this connection to a short passage in Satapatha Brāhmana (XI 1. 6 24): 'Whenever there is drought, then the stronger seizes the weaker, for the waters are the law." Although somewhat enigmatic and mystical, it seems to foreshadow the later theory of the "state of nature" resulting in anarchy and confusion, which led to the foundation of state and monarchy.6

The beginnings of these political speculations were evidently inspired by the rapid increase, in number as well as in size, of the

POLITICAL AND LEGAL INSTITUTIONS

Aryan kingdoms in India, and the consequent growth of the power and majesty of the ruling chiefs who had mostly outgrown the stage of tribal leaders and become territorial monarchs. As we have seen above (p. 265-6) the Aryans had, during this period, spread over nearly the whole of Northern India and established a large number of states. If the Puranic traditions, recorded in Ch XIV, have any value, we must hold that there was a keen struggle for supremacy among these states, and some of them at any rate occasionally became very powerful by annexmg neighbouring kingdoms. But even apart from Puranic traditions we have the evidence of the Vedic texts testifying to the amalgamation of early Rigvedic tribes into more powerful political units. The Pūrus and the Bharatas became united under the name Kuru; the Turvasas and the Krivis became the Paschālas; and lastly there are clear hints about the amalgamation of these two into a Kuru-Paschāla group.

Besides, the descriptions of the Aśvamedha and Rājasūva sacrifices in the texts of this period show that ambitious kings strove to be all-powerful by extending their sway over neighbouring kingdoms, and seem to imply the existence of fairly large kingdoms. Keith, however, is of the opinion that although some of the tribal kingdoms of the Rigvedic days had probably grown in size through amalgamation and expansion, there were no great kingdoms even in this period and no empire as such. The fact that kings are often described in the Atharvaveda as fighting with their cousins (bhrātrīvuas) or with their non-Arvan enemies, has been taken to confirm this view. This is, however, hardly conclusive On the other hand the Astareya Brahmana tells us that kings in the east were called samrats (emperors?), those in the south bhoias. those in the north wrats and those in the famous middle country (eastern Punjab and western U.P.) merely rajans, and that titles like ekarāt and sārvabhauma could be claimed by a king who had conquered the kings in all the four directions. These specific references to imperialism, the flambovant accounts of the imperial grandeur of kings who performed the Asvamedha or the ceremony of royal consecration, and the titles like "conquerors of the whole earth" assumed by them on these occasions, indicate the existence of large kingdoms and occasionally also of empires, even if we make full allowance for obvious poetic exaggerations. There is a fairly long list in the Aitarcya Brahmana of kings who had received the royal consecration at the Rajasuya, and in a general way the list agrees with that in the Satapatha Brahmana of those who had performed the horse-sacrifice. The very multiplicity of these "imperial" monarchs, each one of whom strides forth in the ceremony as a conqueror in all the four directions, perhaps shows that the performance of the Rājasūya not unseldom represented royal aspirations rather than actual conquests. Some of the details of the Rājasūya ceremony are, however, worth noting as embodying the religio-political theory of those days: The king is dressed in rich ins foot on a tiger's skin which is symbolic of his having become as powerful as the tiger. He next carries out a mimic cattle-raid, takes up formally the bow and arrow and takes a step n each of the four directions—a step symbolic of his conquest of that quarter. He then plays, formally, a game of dice in which it is pre-arranged that he commands the winning throw and becomes a victor.

As the Satapatha (XII. 9 3, 3) and Aitareya (VIII, 12, 17) Brāhmanas speak of a daśa-purusham rājyam (a kingdom of ten generations) and as royal descent can be traced in several other cases, the monarchy may be said to be normally hereditary. The term rajaputra, which can be interpreted as "king's son" in the majority of its occurrences in the texts of this period, bears testimony to the same fact. Occasionally, however, a king was selected by the people though the choice was probably restricted to the royal family or at best to members of the noble clans. The election of kings is clearly referred to in certain passages⁸ (AV, I 9, III. 4, IV. 22), but they are interpreted by Geldner⁹ as indicating the purely formal approval of the king's occupation of the throne by the subjects (vis) rather than a selection, in all seriousness, of the king by the cantons (vis). Nevertheless it is certain that in emergencies, people had the power of selecting one member of the royal family in preference to another who was incompetent (Ch. XVII, pp. 356-7)

But whatever we might think of the election of kings as a means of popular control over them, there is no doubt that the people continued to play an important part in politics. Thus particular stress is laid on the necessity of concord between the king and his electors in a passage in the Atharvaveda (III 4) which, by the way, is a clear testimony of the prevalence of the system of election of the kings Besides, it is held by some scholars that an essential part of the coronation ceremony was a solemn oath taken by the kings to the effect that if he opposed the people, he might lose all the merit he had accumulated in his life 10 But it is doubtful whether the question here is of opposing (lift, oppressing) the people or the oriest by whom the oath was administered. 104

There are hymns in the Sainhitās and Brāhmaṇas to celebrate not only the coronation of kings but also the return of exitled kings. This implies that the people had the power to punish kings, if an emergency arose, by banishing them Then in the Tāndya Brāhmana (VI 6.5) a sacrifice is mentioned whereby the officiating Brāhmana could help the Vaiśwas (the subjects) to destroy the king. Royal

POLITICAL AND LEGAL INSTITUTIONS

power was, it is true, gradually consolidating itself, but even a long and unbroken descent could not save a king from the wrath of his subjects. For example, the Srinjayas expelled their king Dushtaitu Pauńsayana from the kingdom, in spite of his ten generations of royal descent.

The popular control in the afrairs of states was exercised, as in the Rigvedic period, through the two popular Assemblies, sabhā and sanuti (ante, Ch. XVII, p. 356). These are also referred to in the later Samhitas and Brahmanas in terms which indicate an effective exercise of authority not only in the general administration but also over the person of the king. Thus we find a fervent prayer put in the mouth of the king: "May the samiti and the sabha, the two daughters of Prajapati, concurrently aid me."11 It is significant to note that this passage describes the popular Assemblies as issues of the same Prajapati, from whom the king, according to the theory of his divinity, derives all his power and authority (ante, p. 430) Thus both monarchy and the popular assemblies are placed on the same tooting as divine institutions according to Satapatha Brāhmana. Other passages 's in the literature of this period also indicate that the king took particular care to be in the good grace of the assemblies and the loss of their favour and support was regarded as a dire calamity for him.

We have no detailed knowledge of the working of the Sabha but may glean a few particulars about it from isolated references. This term also denoted the "assembly-hall" which was used for serious political work as well as for dicing, social intercourse, debates, and entertainment. When the assembly (sabhā) met, a sacrifice was offered in the assembly-hall on behalf of the assembly, the fire used being called Sabhua. The Maitrauani Samhita (IV. 7 4) tells us that women did not attend the sabha, which is but expected as women did not take part in political activity. The same Samhita mentions sabhā in the sense of the court house of the village-judgethe Gramya-vadın-who is referred to in all the Samhitas of the Yajurveda. From the use of the terms sabhāsad and sabhāchara in the very probable senses of "assessor" and "member of the lawcourt" respectively, it appears that the sabha met more often for the administration of justice than for political discussion. A sabhāpati, "lord of the assembly," is mentioned in the Samhitas of the Yajurveda, and the Taittiriua Brahmana (III 7, 4 6) speaks of a sabhā-pāla probably in the sense of "a guardian of an assembly-hall" The sabhā thus appears to be an active institution housed in a place where legal rather than political business was more often transacted, and which also served as the venue of social gatherings and games. It is difficult to distinguish clearly between the functions of the sabhā and the samiti from the available evidence. All that can be said is that discussion and decision on policies of all kinds as well as

legislation constituted the main business of the samiti, which was a larger body, whereas judicial work, which could also be transacted by the samiti, fell chiefly within the purview of the sabhā, though the latter had the right to discuss political matters also.

In spite of the popular assemblies, the king's power was on the increase. This was no doubt due to the growth of large territorial states and the evolution of an official hierarchy in place of the old nobility by birth. The king's main function was the protection of the state and the people, and it was recognized that this required firmness and vigour on his part. In the absence of any authoritative principles of international law, hostility, tacit or avowed, was the normal relation between states, and the king had necessarily to be a great war-lord, endowed with ample military resources. These requisites of kingly office are reflected in a hymn of the Atharvaveda (VI. 87-8) which addresses a new king as follows:

"Here be you firm as a mountain and may you not come down Be you firm here like Indra; remain you here and hold the realm.

"Firm is the heaven, firm is the earth, firm is the universe, firm are the mountains, let the king of the people be firm

"Vanquish you firmly, without falling, the enemies, and those behaving like enemies crush you under your feet All the quarters unanimously honour you, and for firmness the assembly here creates you." 13

This evolution of kingly power, out of sheer political necessity, made further progress by the enunciation of his divinity. The Satapatha Brāhmana, a strong exponent of this theory, upholds the doctrine that by performing certain rites in the Rajasuya sacrifice the king becomes not only exempt from punishment but also the lord of the law.14 But these extreme theoretical assumptions were hardly applicable to real life. The actual instances of expulsion of the king, referred to above, belie these canonical statements Besides, one fundamental principle which characterizes the political thought of the Hindus is the conception of Dharma or Sacred Law which sustains the universe and to which both the king and all sections of the community owe allegiance. The sages, not the king, had the power to interpret this law which was included in the Sacred Canon, and it was the clearly recognized duty of the king to abide by, and give effect to it. The moral and spiritual sanctions behind this Sacred Law were a sufficiently powerful motive, more than we can possibly imagine today, for restraining the wilful exercise of authority by the king. The Brihadaranyaka Upanishad, which forms a part of the Satapatha Brahmana, clearly enunciates this great principle, though it was more elaborated at a later age. In assessing the true character-beneficent or otherwise-of kingly rule in this age, we must take note of the high intellectual qualifications of the kings. Though Kshatriyas, they were as well-versed

POLITICAL AND LEGAL INSTITUTIONS

as, if not more than, the Brähmanas in the Vedas and Upanishads. They took great interest in philosophical discussions. They not only patronized learning, but were themselves teachers and had even Brāhmana disciples, although it was not normal for a Brāhmana to learn from a Kshatriya. Such highly cultured kings must have generally proved benevolent rulers. A memorable piece of advice given to a king as recorded in the White Yajurveda (X. 27) is well worth quoting here. The priest exhorts the king at the coronation in these words: "As a ruler, from this day onwards, judge the strong and the weak impartially and fairly. Strive unceasingly to do good to the people and above all, protect the country from all calamities." There is evidence to show that in this period, the position of the Kshatriyas in general and that of the king in particular had gone up in relation to the Brahmanas, in the social scales of the caste-system A passage in the Aitarcya Brahmana (VII, 29) describes the relationship of each of the remaining three castes to the Rājanya who is taken as the norm (See below, Ch. XXIII).

2 ADMINISTRATIVE ORGANIZATION

Frequent references to a large body of royal officials indicate the development of the administrative system during this period. Among the officers that form the entourage of a king at the royal consecration, figure a Senāmi, a Grāmaņi, and a Bhāgadugha (collector of taxes or distributor of food?). The Grāmaņi—the head of a village, corresponding to the modern village patel—is referred to in the Tattiriya Brāhmaṇa as belonging to the Vaisya caste. There were probably grades of Grāmaṇis, according to the size of the grāma. He was the main channel of royal authority, being entrusted with local administration; but his powers were probably more civil than military.

In addition to the above three officials, lists of members of the entourage at the Rajasuva, as given in the Taittiriva texts, include several others who were not merely courtiers but also public functionaries, and this gives us a general idea of the various administrative departments. There is above all the Purchita who was something like an Archbishop and also a counsellor of the king. Next comes the Sūta. The Sūta, which literally means a "Charioteer," raises a curious question. Was he merely the "coachman" by appointment to His Majesty? This appears improbable from the very important rôle the Sūta plays as a herald or minstrel in the propagation and popularization of heroic and epic poetry in later times. It is not unlikely that, originally a charioteer, the Suta was an employee to whom naturally fell the task of relieving the boredom of the king or warrior, whom he drove on long marches and great distances, by entertaining and encouraging him with stories and especially heroic legends. This fits in very well with the

important part that charioteers are supposed to play, chiefly in wars, but not rarely also in peace. They had a facile tongue and a found of stories and worldly wisdom. One need but remember the vital part played by the charioteer in the Bhagavadgitā.

After the Süta, we find mention of two other officials, v.z., the Samgrahitri, the treasurer, and the Akshāvāpa, the Superintendent of dicing Whatever our views regarding gambling, we must remember that dicing was (like racing today) a royal sport, and that there must have been a department of dicing in those days. This is confirmed by the symbolic ceremony of "dicing" as forming part of the Rājasūya. This list is supplemented by the satapatha Brāhmapa which includes the Kshattrı (the Chamberlain?), Gonikartana (Govikartana), the Huntsman, and Pālāgala, the Courier. The Maitrāyarā Samhītā mentions the Takshan or "carpenter" and the Rathakāra or "chariot-maker."

Reference is also made to the Sthapati. He was either the chief judge, as we shall have occasion to mention later, or the local chief of a part of the kingdom, because we come across a Nishāda-Sthapati in the Sūtras, who may have been the ruler of some frontier aboriginal tribe.

The officers mentioned, above, with the exception of the last, are called ratnins or "Jewels." The name is derived from an important rite of the Rajasuva ceremony, called Ratna-havis or Jeweloffering, in course of which the king on successive days had to make offerings to the gods in the houses of these officials. leaves no doubt of the high status and the great importance of these royal functionaries. Yet the Brahmana texts emphasize the point that some of them were inferior to both Brahmanas and Kshatriyas, and immediately after the Jewel-offering ceremony, the king had to perform two rites for expiating the sin committed by putting these unworthy persons of low classes or castes in contact with the sacrifice (Sat. Br. V. 3 2. 2). This curious procedure proves beyond doubt that a new type of nobility, that of royal service, had emerged by the side, if not in place, of the old nobility by birth. 16 It is an indirect testimony to the growth of a solid hierarchy of officials and the efficient organization of the machinery of administration.

Isolated references give us some idea of the great power and influence of this official nobility. Thus the Sūta and the Grāmaņī are designated king-makers (rdja-kṛti,), rd while a list of eight persons, said to be Vīras (chief supporters or defenders) of the king, comprise, in addition to his queen, son, and brother, the Purohita, the Sūta, the Grāmaṇī, the Kahattri, and the Samgrahiṭri. 18

The descriptions of the Rājasūya (royal consecration) in the forest Sanhitās and Brāhmaņas depict the king as the "Protector" of the people in general and of the Brāhmaṇas in particular. In return for this protection the king is allowed to live on the (income

POLITICAL AND LEGAL INSTITUTIONS

of the) Viá (the subjects). 19 For discharging this duty efficiently, the king had to fight not only in defence of his realm but also to conduct offensive war, which was generally undertaken in the season of dew (1.e. at the end of the monsoon) and in which he had to "sack cities." He led the fighting host to battle in person, with the Senāni (army-leader) working under his direction, and had the right to a share of the booty of war after a victory. The Purchitz ensured the king's safety and victory in battle by his prayers, spells, and charms, and this is in keeping with the rôle of the Purchita in peace as the regular adviser of the king.

For the maintenance of the machinery of administration which protected the people in war and peace, the king had the right to receive contributions and loyal service from his subjects. Though in origin these may have been voluntary they soon assumed the form of tribute (Bali), a kind of taxation that seems to have been meant in the reference to "the share of village, horses and kine" in the Atharvaveda (IV. 22. 2). The very frequent description, in the texts of this age, of the king as the "devourer of the people," is perhaps not to be understood in the sense of a "fleecing of the people" by the king, but as indicating that the royal household and the king's retinue were maintained by the contributions of the people in the form of food-grains and other necessaries of life (ante, Ch. XVII. pp. 359-60).

The incidence of taxation, however, did not fall equitably upon all classes of people. As the members of the royal family, the nobility and the Kahatriya class generally assisted the king in war, it is but natural that this right of maintenance should also be claimed by them. The Brähmapas also claimed to be exempt from the normal exercise of royal authority, particularly in respect of taxation. In the Rājasūya ceremony the priest tells the assembled people: "This man is your king, Soma is the king of us Brāhmapas." This passage is then applied to justify the Brāhmapa's exemption from taxation. How far this exemption was carried in actual practice it is difficult to say. But it appears that on the whole, the main burden of the taxation fell on the "people," who pursued peaceful occupations. such as agriculture, cattle-keeping, the arts, crafts, industries, and trade. The texts often describe the "people" as forming the backbone of royal power.

3. LAW AND LEGAL INSTITUTIONS

The Satapatha Brāhmana (V. 4. 4. 7) tells us that the king wields the rod of punishment (Davāda), but is not subject to it. He himself, as a rule, appears to have administered criminal justice. That he was assisted by assessors is probable, though not certain. At any rate, in his absence, he could delegate his jurisdiction to a royal officer, because the Kāṭhāka Samhhtā (XXVII. 4) mentions

the Rājanya as an overseer (adhyakeha) when a Sūdra is punished. Among the crumes enumerated or otherwise recognized are, theft, robbery, adultery, incest, abduction, the killing of an embryo, the killing of a man, the slaying of a Brähmana (which alone amounts to murder proper and is expisable by the performance of an Aáva-medha), drinking intoxicating luquor, and treachery, punishable by death. Petty offences in the village seem to have been left to the Grämyavädin or "village judge" for disposal. The view²1 that there was increase of crume during this age because Rudra is halled as the protector of thieves does not appear to be correct.

It is curious that even a minor bodily defect such as the possession of bad nails, or the violation of a purely conventional practice was looked upon as a crime. But we should remember that the implicit belief in rebirth, and the fixed notion that for every defect or mishap in this life a person himself is responsible through actions committed either in this life or in a past one, can explain a number of anomalies in the judicial or social code of the Hindus. This is often forgotten when the charge of an inhuman and brutal outlook is preferred against their legal and social structure. That the sense of justice was high is seen from the record of long discussions over a case where a child is accidentally run over and killed by the king and the Purchita driving in a chariot. The matter is referred for arbitration to the Ikshvakus who gave the judgment that an expiation was due Private vengeance was also permitted to serve the ends of justice, though the crudities of such a procedure were held in considerable check by the system of Varradeya "wergeld"-"the money (in the form of a hundred cows, for example) to be paid for killing a man as a compensation to his relatives."

For evidence, eye-witnesses were more important than informers. Ordeals were also probably looked upon as valid tests of innocence or guilt The Chhândogya Upanishad (VI. 16. 1-2), while explaining how "Truth has the power of saving a man even from death," says: "When an alleged thief is brought handcuffed to the place of trial he is asked to catch hold of a heated axe. If he has not committed the theft, he covers himself with the glory of truth, does not burn his fingers, and is set free as an innocent person, but if he is guilty he is burnt on the spot."

The punishments for crime were rather severe. If a thief was caught red-handed, death or the cutting off of hands was the penalty; in milder cases, binding to posts and the return of stolen goods sufficed as punishment.

As regards civil law our knowledge is mainly confined to the ownership of land, succession, and partition of property. Individual property or individual ownership in land for the purposes of cultivation is recognized. This individual tenure of land turned out to be (in actual practice and fact, if not in legal theory) tenure by a

POLITICAL AND LEGAL INSTITUTIONS

family, rather than by an individual. In this sense must be understood "the conquests of fields" so often referred to in the Samhitas. Communal property in the sense of "ownership by a community" or "communal cultivation" is, however, unknown. It is but natural that a family should live together, with undivided shares in the land. With settlement and peaceful occupation of the country, inheritance of landed property must have been in force even earlier than the age of the Sutras, which state them clearly for the first time. The word "Daya" has already come to mean in this age "inheritance" in the sense of "a father's property which is to be divided among his sons either during his life or after his death." In a legal sense, the property of the family is the property of the head of the house, usually the father. The Taittiriua Samhita (III. 1, 9, 4) has the famous episode of Manu's division of property among his sons. Näbhänedishtha was excluded from the inheritance, but as a compensation was taught how to appease the Angirasas and secure cows from them. An important aspect of this account is that the property divided was movable property and not land, and that cattle rather than land was the foundation of wealth, because cattle could be and were used individually, whereas land could not be freely disposed of. In the Aitareya Brahmana version of the story, the sons are said to have made the division, leaving to Nābhānedishtha only the care of their aged father. Does this suggest that the sons were legally owners with their father? The evidence however seems to be in favour of the rule of patria potestas, whereby the father owned the property. The sons, when grown up, might claim the property and induce the father to divide it, but this cannot amount to the doctrine that every child on birth had a legal share in the property. The legend of Sunahsepa points to the developed patria protestas of the father. As regards the division, preference was shown to the elder son if it took place after the death of the father; during his lifetime, the preference was usually shown to the elder son but not rarely to another (Pañchavimsa Brāhmana, XVI. 4. 4). Women were excluded from inheritance or partition. Neither they nor the Südras had any right to property. There is not much information available regarding the legal relations of husband and wife after marriage. The husband in all probability claimed the wife's dowry and earnings, if any. The Satapatha Brahmana (IV. 4-2. 13) says that women own neither themselves nor an inheritance.

Original acquisition of chattels was brought about by taking possession of them when found on one's own land or on unoccupied and, provided no one else claimed earlier ownership of them. They could be transferred by gift and barter or sale. The only contracts known were those in regard to the business of money-lending. The Dässa and Dässa did most of the labour for which ordinary

workers would have to be hired. The artisans and skilled workers of the village received fixed remuneration from the villagers and not payment for each separate piece of work.

As regards civil procedure, voluntary arbitration appears to be the earlier form of judicial procedure, in which the plaintiff (the (praisin), the defendant (abhi-praisin) and the arbitrator or judge (praisa-vivāka) figured, as the three appear in the list of victims at the Purushamedha in the Vājasaneyi Sanhitai (XXX. 10). It is uncertain whether assessors were called in. The jūātri is very probably a technical legal term for a witness in civil transactions. Or deals were but rarely used for deciding civil disputes, but their use as an evidence in civil law is proved by the case of Vatsa who demonstrated his purity of descent by walking through fire without sustaining any injury. The oath, though not mentioned as an independent instrument of evidence, must have formed part of the ordeal declaration when there was an occasion for it.

Finally we may discuss the legal aspect of the question of the ownership of the land vis-d-vis the king, as far as it is reflected in the texts of this age. Land was originally acquired when it was occupied by Arvan tribesmen among whom the apportionment must have taken place later. When the tribal chief assumed the status of a king he controlled all transactions regarding land When the Satapatha Brāhmana (VII. 1. 1. 8) tells us that the Kshatriva gives a settlement to a man with the consent of the people, it implies that separate holdings existed. The conception of the absolute royal ownership of all land does not seem to have arisen during this age "Grants" of land only implied transfer of privileges regarding revenue but no ownership. Similarly when the king granted to his favourites his royal prerogatives over villages, the "grant" is to be understood as the transfer of privileges in fiscal matters. That a gift of land in the sense of "the conferring of ownership" was looked upon as unconstitutional may be inferred from a story in the Satapatha (XIII. 7. 1-15) and Aitareya (VIII. 21. 8) Brāhmaņas that when king Viśvakarman offered the earth (probably a piece of land) to his officiating priest, the earth refused to be given. Such gifts of land probably constituted a violation of customary law. The king certainly had the power to expel a Brahmana or Vaisya (there is no mention of the Kshatriya) from his land, but this power drew its sanction not from his ownership of the land but from his sovereignty, and was recognized only as a royal prerogative.

GENERAL REFERENCES

DR. U. GHOSHAL, A History of Hindu Political Theories (1923). DR. BENI PRASAD, Theory of Government in Ancient India (1927).

Willoughby, Political Theories of the Ancient World, p. 14.
 Op. cit., p 15.

POLITICAL AND LEGAL INSTITUTIONS

- 3. Ghoshal, op. cit., p. 27.

 Set. Br., V. 1. 3. 4; 1. 4. 2; 2. 1. 11.; 2.1.24; 2. 2. 14-15; 2. 5. 3; 3. 4. 23;
 4. 3. 27; Teltt. Sain., 1. 8. 16.
 4. 3. 37; Teltt. Sain., 1. 8. 16.
 3. 6. Ghoshal, v. 3. 2. 12. Ghoshal, op. cit., p. 33.
 6. Ghoshal, v. 3. 5. 12. Ghoshal, op. cit., p. 33.
 7. CEII, 1, p. 130.
 8. One of these is quoted in Ch. XX, p. 410.
 8. One of these is quoted in Ch. XX, p. 410.
 8. Ved. Stud., 2, 303.
 10. PCC VIII, 502.
 11. Set Ch. VIII, 502.
 11. Set Ch. VIII, 502.
 11. Set Ch. VIII, 502.
 12. AV, VI. SS. 3; VIII, 12.
 12. AV, VI. SS. 3; VIII, 12.
 13. For other horms of the nature of Ch. XX, p. 410.
 14. Tell Set horms of the Cheshal, op. cit., p. 40 Dr. Beni Prasad, however, thinks that "the lordship of the law" here means the "lordship of justice" (op. cit., p. 19). (op cit., p 19)
- (op crt., p. 19).

 The ceremony is described with slightly varying lasts of officials in Set. Br., Y. 3. 1; Tent: Sem, 1 8 9; Tent: Br., 1 7. 3

 Dr. Choshal thinks that the official nobility took the place of the old nobility of birth (op. crt., p. 39).

 Sai Br., III 4 1 7; XIII 2 18.

 Fascineumies Br. XIX 4.

 At Br., VIII 12. II.

 Sai Br., V. 3 12. 4 2 3

 CHI, I, p. 135.

441

CHAPTER XXII

RELIGION AND PHILOSOPHY

1. THE ATHARVAVEDA

For our survey of the evolution of religion and philosophical thought in the post-Rigwedic age we may begin with the Atharvaveda as it has preserved an aspect of primitive religious ideas which are not to be found in the other Vedic texts.

The oldest name of the AV in Vedic literature is Atharvangirasah, that is, "the Atharvans and the Angirasah." The two words denote two different species of magic formulae: atharvan is "holy magic bringing happiness" and angiras is "hostile or black magic." The former includes among others formulae for the healing of diseases, while the latter includes curses against enemies, rivals, malicious magicians, etc These two kinds of magic formulae then form the chief contents of the AV.1 but these ancient magic songs which were originally popular poetry appear in the Samhitā in a Brahmanized form because of the priestly outlook of the compilers, which betrays itself in the similes and epithets. The gods are the same as in the RV. Agni. Indra, etc But their characters have become quite colourless, all being invoked as "demon-destroyers", and their natural basis is utterly forgotten. The theosophical and cosmogonic speculations of the AV indicate a later stage of development than that in the RV. It contains more theosophic matter than any other Samhitä The philosophical terminology is of an advanced type, and the pantheistic thought is practically the same as in the Upanishads. There is, of course, a magical twist given to the philosophical hymns. For example, AV, IV 19. 6 employs the conception of asat, "the non-existent," as a spell to destroy enemies, demons, magicians, etc.

Above all, the principal aim of the Atharvaveda is to appears (the demons), to bless (friends), and to curse, and as such it did not find much favour with the priesthood, who excluded it from the sacred triad—the threefold lore. This was, however, a later development. At their origin, magic and cult both have an identical aim—the control of the transcendental world. They have this essential unity of purpose. There soon comes a time, however, when the priest who pays homage to the gods parts company with the magician who is in league with the demons. It is a remarkable fact, however, that in spite of this aversion to the Veda of magic, the ritual texts which describe the great sacrifices do incorporate exorcism-formulas and magic rites? whereby the prest can destroy

RELIGION AND PHILOSOPHY

"the enemy whom he hates and who hates him," and the law-book of Manu (XI. 33) sanctions the use of exorcism against enemies.

As Dr. Winternitz3 points out, "many of these magic songs, like the magic rites pertaining to them, belong to a sphere of conceptions which, spread over the whole earth, ever recur with the most surprising similarity in the most varying peoples of all countries. Among the Indians of North America, among the Negro races of Africa, among Malays and Mongols, among the ancient Greeks and Romans, and frequently still among the peasantry of the present-day Europe, we find again exactly the same views, the same strange leaps of thought in the magic songs and magic rites, as have come down to us in the Atharvaveda of ancient India. There are, then, numerous verses in the Atharvaveda, which, according to their character and often also their contents, differ just as little from the magic formulas of the American-Indian medicine-men and Tartar Shamans as from the Merseburg magic maxims, which belong to the sparse remains of the oldest German poetry." The AV then is unique among the texts of this age-the Samhitas and Brahmanas-as an important source of information regarding popular religious belief, not so far modified by priestly religion as to be unrecognizable in its original form

Occasionally, we come across hymns like IV. 16, which look like a patchwork of old and new material. The first half of IV. 16 describes the power of the Almighty, the omniscience of God, in language of such impressive beauty, that as a piece of literary art it has hardly any equal in the whole of Vedic literature,² and yet the second part is an exorcism-formula against liars. This is a case (not rare) in the AV where a fragment of older poetry breathing renuine religious fervour has been dressed up as a magne formula.

There are hymns of a philosophical import in the AV though they are inspired more by practical considerations than by a longing for the Ultimate Reality The hymns definitely presuppose a high level of metaphysical thought. There is some exaggeration in the opinion of Winternitz,5 that there is in these hymns more of the mystery-mongering so characteristic of the magician than the search for truth that distinguishes a philosopher, and that they do not represent even a transitional stage between the creative thought of the philosophical hymns of the RV and the philosophy of the Upanishads. The idea of a supreme God like Prajapati. as the creator and preserver of the Universe, and that of an impersonal creative principle (which form the two chief doctrines of the Upanishads), and some technical terms such as "brahman," "tapas," "asat," are met with in the Atharvaveda. The conception of Rudra-Siva in the AV certainly represents a transitional stage between the conception of Rudra in the RV and the systematic philosophy of Saivism in the Śvetāśvataru Upanishad. Original or otherwise, profound philosophical ideas do crop up now and then in the AV. Kala or Time as the First Cause of all existence (XIX, 53, 5, 6) is a truly philosophical notion, but round it are woven metaphors that give a mystic turn to the great idea (XIX, 53). Similarly Prāna (Breath) and Kāma (Love) are described as First Causes in XI. 4 and IX. 2 respectively. The Rohita hymns (XIII, 1-4) contain a sublime glorification of the "Red One" (the genius of the sun) as a cosmogonic power. Alongside of this are found mystical fancies such as the exaltation of the sun as a primeval principle under the guise of a Brahmacharin. and the glorification of the Ox, the Bull, the Cow, and the Vratva. each being alternately looked upon as the Highest Being, in XI. 5; IV. 11, IX. 4, X. 10 and XV respectively. AV, X. 2 is but an imitation of the philosophical hymn X. 121 of the RV and treats of the realization of Brahman in man, from the physical aspect. AV, XI 8 suggests the idea of Brahman as the First Cause of all existence and of the oneness of man with the world-soul. Reference has already been made above (p. 414) to the long hymn (XII. 1) to Mother Earth which is acclaimed as one of the most beautiful productions of the religious poetry of ancient India. Though classified as a cosmogonic hymn, there is not much philosophy in it, but a relieving feature is that it contains no trace of mysticism and thus rises to the sublime heights of religious poetry

It must be admitted that the Atharvaveda religion, being thus more popular than priestly, formed a transitional stage to the idolatries and superstitions of the ignorant masses, rather than to the sublimated pantheism of the Upanishads and further that it led to magic being confused with mysticism.

It is generally held that the religion of the AV is only an amalgam of Aryan and non-Aryan ideals achieved after the advance of the Aryans into India. According to this view6 the Vedic Aryans, as they advanced into India, came across uncivilized tribes worshipping snakes, serpents, stocks, and stones, but instead of destroying these barbarian neighbours or allowing themselves to be swamped by them, the Arvans absorbed them. This spirit of acccommodation naturally elevated the religion of the primitive tribes but degraded the Vedic religion by introducing into it sorcery and witchcraft. In the opinion of the present writer, this view is not wholly correct. Magic and religious cults, having an identical aim in the beginning, namely, the control of the transcendental world, have parted company in the AV exactly as they have done in the religions of most peoples in the world, though there is no denving that such a process of separation was considerably helped by the Aryan contact with the natives of India, who had their own worship of spirits and stars, trees and mountains, and other superstitions.

RELIGION AND PHILOSOPHY

2. THE SAMAVEDA AND THE YAJURVEDA SAMHITAS AND THE BRAHMANAS

With the S&maveda and Yajurveda we enter a new world, as it were. The atmosphere is pervaded now by the smoke of the sacrifice and the incense of the ritual. The sacrifice dominates everything. These two Sainhitäs have been compiled strictly from the point of view of their use at the sacrifice. They are, indeed, nothing more than text-books—song-book and prayer-book—for the practical use of two of the four principal priests, the Udgātri and Adhvaryu. No account of the religion of this period can be understood in its proper perspective unless we follow the broad lines along which the institution of the sacrifice developed in this age

The simple ceremonial of the domestic ritual which any individual, rich or poor, priest or layman, could perform in his own home may be reasonably supposed to be the starting point of the sacrificial cult. The single fire of the domestic hearth was the altar at which burnt offerings were presented, to the accompaniment of appropriate prayers. There were daily and periodical sacrifices. such as the morning and evening offerings, the New and Full-moon sacrifices and the four monthly or seasonal sacrifices. This domestic fire was also the blazing divine witness, propitiated by suitable oblational offerings accompanied by appropriate prayers, to a number of domestic ceremonies that endowed with religious sanctity various events in the life of a family, such as birth, marriage, other occasions of daily life, funeral, ancestor-worship, house-building, cattle-feeding, and farming. The domestic fire was also the centre of magic rites which were calculated to avert diseases and unpropitious omens, as also the centre of exorcisms and rites for love-magic, etc. A very large number of the songs and spells of the Atharvaveda naturally fit in, most admirably, into the framework of these domestic rites, as a substantial part of these partakes of the nature of magic rites. In these, what may be called the domestic varieties of the sacrificial cult, the householder himself generally officiated as the sacrificial priest, but he might call in the "Brahman," if he needed assistance.

But even in the age of the Riqueda, as noted above (p. 380), the cult of the Grand Sacrifices, especially the Some-sacrifices, was gradually developing by the side of the cult of the domestic rites, described above. They were, however, so elaborately developed and systematized during the period under review that the Sāmaveda and Yafurveda Samhitā's have been compiled solely for use at these Grand Sacrifices. A regular science of sacrifice has now been evolved and forms the sole topic of the Brāhmaṇa texts. Three sacred fires instead of one were necessary for these Grand Sacrifices, and altars for these were erected on a vast sacrificial place set up accordatars for these were erected on a vast sacrificial place set up accord-

ing to rules and to the accompaniment of an elaborate ritual. A formidable array of priests, divided into four groups headed by four chief priests, was required for the correct performance of the extremely complicated ritual and elaborate ceremonial which were the sine qua non of the Grand Sacrifices. The Yajamāna (sacrificer) had practically nothing to do but to give liberal fees to these priests. These Grand Sacrifices were called "Srauta" or "based on Sruti," in the sense that the description of their theory and practice was also embodied in the Sruti literature, i.e. the Samitias and Brahmanas, whereas the domestic (Grihya) sacrifices referred to above were called Smārta (based on Smriti or "memory") in the sense, that they are described only in the Grihya-Sutras which fall into Smriti literature which has no divine sanction and is authoritative only in so far as it embodies the tradition derived from ancient sages.

The titles and functions of the heads of the four groups of priests are: (1) The Hotri or "Invoker" who was to praise the gods and invoke them to the sacrifice and whose duty it was to form the canon (sastra) for each particular rite of the Soma sacrifice by selecting, from the hymns of the Rigveda, the verses applicable to it and to recite them, (2) the Udgatri or "Chanter" who sings chants (sāman), accompanying appropriately the various stages of the preparation and presentation of the sacrifices, especially the Soma sacrifices; (3) the Adhvaryu or "Performer," who executes all the sacrificial acts, muttering simultaneously the prose prayers and the sacrificial formulae (yajus); (4) the Brahman or "High Priest" who as the general superintendent vigilantly guards against any error or deviation from the correct performance of the sacrifice and protects the sacrifice from danger by repeating sacred formulae by way of expiating for any error done. The Brahman has to be well versed in all the Vedas, but the Hotri has to be conversant only with the Rigueda, from which he takes the Yājyās (sacrificial verses) and the anuväkyäs (invitatory verses). Similarly the Udgatri has to be well versed in the Sāmaveda Samhitā only, to master the melodies and the song-verses with which they are connected, and to sing the stotras, consisting of song-stanzas, i.e. stanzas or richah which are made to bear certain melodies or samans. Finally, the Adhvaryu priest has to be proficient only in the Samhitas of Yajurveda as he mutters the prose formulae and prayers called Yajus and the verses (richah) collected in it for his use.

Like the two Sainhitās mentioned above, the Brāhmaṇas also treat of the sacrificial liturgy. The age represented by them all is an age of forms, concerned more with the externals of religion than its spirit. Mechanical sacerdotalism is the religion now. Symbolic significance is attached to even the smallest minutiae of

RELIGION AND PHILOSOPHY

ceremonies that are purely external (ante, p. 423). Every prayer that accompanies a rite asks for some worldly gain.

Nevertheless there is an interesting substratum of popular religion, underlying this intricate and elaborate ritual of the sacrifice. The Rajasuya or the ceremony of royal consecration must have had once an appeal to the festive instincts of the people. The Vajapeya is characterized by a chariot race which must have been originally the main element and which must have always made a great hit with the people. The ritual of the Mahāvrata, which is probably a reminiscence of a very popular primitive celebration of the winter solstice, plays a notable part in the Gavamayana, the year-long Sattra. The horse-sacrifice is fundamentally the elaboration of a simple rite of sympathetic magic. Above all, however, the building of the altar for the sacred fire is the one rate which, though a simple one in ancient times, has been so worked over by the priests that it reflects in a mystic sense almost a new conception of the unity of the universe and the mode of its preservation. The Brahmanas record, as an ancient practice no longer current, the slaving of a man during the building rite in order to secure the permanence of the structure. The only plausible explanation of the disproportionate importance and treatment claimed by this rite is the one given by Eggeling7 that the building of the fire-altar symbolizes the reconstruction of the Universe in the shape of Prajapati, the full significance of which will be explained later.

There is no longer the spontaneity or simplicity of religious feeling that is associated in a large measure with the sacrifice in the age of the Rigneda. Although the theory of the sacrifice is superficially "I give thee (O God) that thou mayest give," there is so little faith in it, that sympathetic magic dominates the entire sacrificial system. The priest has arrogated to himself such powers in this regard, that he could ruin (if he pleased) even the patron for whom he officiates by deliberately committing errors. The efficacy of the ritual depended on the correct pronunciation of the mantrus recited, because it was their sound rather than their meaning that was credited with power. The viniyoga or liturgical application of the RV hymns to the details of the sacrifice had no relation to their meaning So ludicrously theoretical was the development of the sacrificial cult that the list of sacrificial victims in the Yajurveda texts includes human beings as well.

As the sacrifice is the only power that counts and could bend even the gods to the will of the sacrificer, the old gods are not of much consequence now. As a result some of the minor deities of the Rigueda have either disappeared or exist in name only. Prajāpati (as "Lord of creatures") is the main subject of theosophical speculation in the Brāhmaṇas, but he is not "a god of the people" as Rudra is. This is indicated by the number of litanies addressed

to the latter in the Yajurvedic Samhitas, and the attention devoted to him in the Astareya, Kaushitaki and Satapatha Brahmanas. Rudra as Bhūtapati is a dread figure, who (we are told in Aitareya Br.) usurped the dominion of Prajapati over all cattle, when the latter committed incest with his daughter. He appears at the sacrifice in black raiment and claims the sacrificial victim. This Rudra is (in all probability) not merely a development of the Rigvedic Rudra, but an adaptation of him by amalgamation with a popular god, an aboriginal god of vegetation, closely connected with pastoral life. He is thus the "great god" (mahadeva) and has already received the appellation "Siva" (the "Auspicious One") which became later his chief name. Next to Rudra comes Vishnu. constantly identified with the all-important sacrifice and therefore rising to a high position. Probably he was prominent enough to claim the undivided allegiance of some localities while Rudra was worshipped in others. Nārāvana and Vishnu are brought into relation in the Taittiriya Aranyaka. In other respects, there is little change in the Rigvedic pantheon. Gandharvas, Apsarases, Nāgas, etc., are raised to a semi-divine rank. Snake-worship (borrowed probably from the aborigines) and the mechanical motif of the "Devasura" battles make their appearance now. Monotheism is being advocated. "Brahman." from meaning the "prayer-verses and formulae" in the Veda, containing secret magic power by which man seeks to bend divine beings to his will, came next to mean the travividyā or "a collection of these prayers and formulae in the three Vedas"; then "the first created thing," because the trayi was supposed to be of divine origin and because the superhuman (nay superdivine) sacrifice was contained in and therefore derived from the trayi; and finally (in this period) came to signify the "creative principle"—the cause of all existence. Such an evolution of meaning was possible because, in this age, the divine origin and authority of the Vedas is accepted without question. In the Purushasūkta (RV, X. 90) the act of creation is treated as a sacrifice completely offered (sarva-hut) from which the three Vedas arose The Satapatha Brāhmana (XI, 5, 8, 1 ff.) version of this doctrine is that the Self-existent breathed out the Vedas. The so-called authors of the Vedas are just inspired seers (Rishis) to whom the divine revelation was communicated. The doctrine that sabda or "articulate sound" is eternal has thus an important correlation to the fact that the Vedas were transmitted by word of mouth, from teacher to pupil in unbroken succession through untold generations. The Vedic tradition, considered sacred and infallible, must necessarily embody the truth, the whole truth, and nothing but the truth. But the early Vedic texts are not always consistent. This enabled later the votaries of the most diverse doctrines to quote texts from the Vedas in their support, and although philosophy became scholas-

RELIGION AND PHILOSOPHY

tic as a result, one advantage was that a reliable basis—the unfailing intuition of the most ancient inspired seers—was available to the Indian thinkers.

There are many creation-legends in the Brāhmanas which are a strange admixture of metaphysical thought with disconnected explanations of sacrificial rules. The majority of them generally begin with the narration that Prajāpati practised austerities through self-torture and mortification as a preparation for the task of creation, but there are passages in the Brāhmanas where Prajāpati himself is looked upon as created and where the starting point of creation is either the primcval waters or Brahman or the Non-existent. Desire is the germ of existence, the motive power of all creation.

That life is a duty and a responsibility is the central ethical teaching of the Brahmanas. Man is born with certain rings or debts which he must discharge in his life. He has a debt to pay to the gods, to the Rishis, to the manes, to men, and to the lower creatures. And he discharges these debts, if he worships the gods, studies the Veda, performs funeral ceremonies, is hospitable to guests, and offers oblations to the bhūtas. Thus, there is no lack of high moral sense and noble sentiments. Selflessness must characterize all our actions The Brahmanas have a remarkable sacrifice—the Sarvamedhawherein everything is to be sacrificed to attain the freedom of the spirit. Prayer and good works constitute godliness, which is the first requisite of a good life. Truthfulness in utterance and action is the foundation of moral life. There are hints in the Brahmanas that excessive ritualism was bringing on a reaction. For example, knowledge rather than sacrificial gifts or asceticism is valued in the Satapatha Brahmana (X. 5. 4. 16), although asceticism is also held up as a great ideal elsewhere (Taittiriua Brahmana, III, 12, 3). The theory that confession implying repentance somewhat mitigates the guilt is seen in the Satapatha Brahmana. Inner purity was insisted on, as much as external purity. Truth, performance of dharma (duty), respect for parents, love of fellow-beings, and abstinence from theft, adultery, and murder were the sine qua non of a good life.

The description of heaven in the RV is only elaborated in the other Samhitäs and Brähmanas. The essentials are the same. The Atharvaveda tells us how the dead man is conducted upwards by the Maruts with gentle breezes fanning him until he recovers his complete body and meets the Fathers who reside in the company of Yama. The idea that the dead in heaven are nourished by the piety of the relatives on earth is also found in the AV. Such nourishment may either be buried with the dead, so that the grains of corn and sesame, so buried, may turn linto wish-cows in heaven, on the nourishment may be conveyed through subsequent offerings. This is indeed the germ of the later Sräddha idea. The Rigoeda conception of nitriti as a place of darkness in which the luminaries

are lost has been developed by the Atharvaveda into a naraka-loka ("hell") which is the abode of female goblins and a place of utter darkness. The Satapatha, the Jaiminiya and Kaushitaki Brahmanas add their own touches to this horrid picture of hell. The two paths-one of the Devas and the other of the Pitris-are naturally mentioned, as they have been already foreshadowed in the RV. The theory of metempsychosis does not appear to have been very clearly formulated in the Samhitäs and Brähmanas, though the doctrine that the agony of death is to be endured not once only but repeatedly as one may die repeated deaths in the next world, prepares us for the very important part that the theory plays in the Upanishads where the conception of repeated deaths is merely transferred from the next world to the present. The idea of reward and punishment, after death, in exact correspondence to the good and bad deeds of a person in this life, has gained a firm hold in this period. The attainment of immortality and the company of the gods in the heaven-a highly ennobled form of earthly life perpetuated in surroundings of blissis the deeply cherished aim of, and incentive to, the practice of piety and good works in this life.

This is a considerable advance over the view of the Rigveda. There, immortality in the abodes of the blessed-the region of milk and honey-is assured to knowledge and virtue, whereas not much thought is given to the fate of the sinner who is apparently condemned to the complete obliteration of his personal existence. Now, however, the wicked are described as being born again in the next world (along with the good) suffering the punishment which their misdeeds bring upon them. That "man is the architect of his own fate" becomes a perfect truth according to this theory. And the supreme ment of philosophical thought in this period is the development of the doctrine that reward and punishment are not eternal. This is but a logical development. How could the limited good or evil that men can do in the brief span of a single life on earth bring on endless pleasure or pain in the next world? Hence follows the theory that penance and atonement can purify and absolve the soul from guilt and exhaust the period of suffering. The Brahmana doctrine, that whatever food a man consumes in this world in return consumes him in the next world (Satapatha, XII. 9. 1. 1) is but the transfer from the physical to the moral plane of the law that action and reaction are equal and opposite. Similarly, the enjoyment of the rewards, which is in exact measure to the good deeds performed, must some time come to an end. Thus there is the prospect of rebirth again for both the pious and the wicked. So arises the wonderful conception of a beginningless and endless circuit of birth and death; the so-called samsara or "bondage of life and death," culminating in that unique conception of ultimate happiness which is much higher than that of

RELIGION AND PHILOSOPHY

a life in heaven. It is a conception of freedom from samsāra, which is the true moksha (release) or absolution. First desire and then its fulfilment is a vicious circle, and the only escape from it is desirelessness induced by true knowledge. This, however, is the main doctrine of the Upanishads and is only adumbrated in this period. For example, when the Satapatha Br. asks the seeker for truth to meditate upon the Self, made up of intelligence and endowed with a body of spirit, a form of light, and an ethereal nature, the doctrine has a speculative but none the less ritual background. Similarly, the building of the fire-altar is (as mentioned above) symbolical of the reconstruction of the Universe, in the shape of Prajapati. If we now bear in mind the two sets of mystical equations: (1) Prajapati == Agni = divine counter-part of the human sacrificer; and (2) Praiapati = Time = Death (in the final analysis), we can understand that the human sacrificer becomes Death (in a mystic sense) and thus raises himself above death to everlasting bliss. In this process the true nature of Prajapati and of the sacrificer is revealed as Intelligence. This same doctrine reappears in another form in the Upanishads as we shall see later.

3. THE ARANYAKAS

The excessive ritualism of the Brahmanas produced a natural reaction. The Aranyaka texts are themselves virtually an admission that the correct performance of a compulsory ritual, that had developed to enormous proportions in the Brahmana period, could not be expected from all, young and old, from residents of villages and towns as well as from those who resided in the forest. There were again some parts of the sacrificial lore which were of an occult and mystical nature and which could be imparted to the initiated only in the privacy of the forest. The Aranyakas do not lay down rules for the performance of sacrifices, nor do they comment on the ceremonial in the Brahmana style. They are mainly devoted to an exposition of the mysticism and symbolism of the sacrifice and priestly philosophy. Meditation, rather than performance, is the spirit of their teaching, and they naturally substitute a simpler ceremonial for the complicated one of the Brahmanas. We cannot definitely say whether the theory of the Asramas was deliberately formulated by Brahmanism with a view to accommodate the new doctrines that were raising their heads against the older canon of the Brāhmanas and the philosophy of the sacrifice.8 But it must be admitted that the Aranyakas or "Forest-texts" came in exceedingly handy, as ideally suitable Vedic texts for the daily study of the forest-hermits, as distinguished, on the one hand, from the student and householder who could do justice to the cult of the Vedic sacrifice set forth in the Brahmanas, and on the other, from the ascetic

who could dedicate the rest of his life to the contemplation of Brahman-the Absolute expounded in the Upanishads.

Important service was rendered by the Aranyakas when they stressed the efficacy of the inner or mental sacrifice as distinguished from the outer or formal sacrifice, consisting of oblations of rice, barley or milk They thus helped to bridge the gulf between the "way of works" (karmamarga), which was the sole concern of the Brāhmanas, and the "way of knowledge" (jñāna-mārga) which the Upanishads advocated. The Aranyakas further lay down Upasanās (or courses of meditation) upon certain symbols and austerities for the realization of the Absolute, which by now had superseded the "heaven" of the Brahmana works, as the highest goal of the devout. These symbols form the link between the Brahmanas and the Upanishads as they are borrowed from the sacrifices. Finally the compromise between the two "ways" of karman and iñāna was consummated when karman was made subsidiary to, and a preparatory stage for, mana in the Aranyakas and Upanishads.

¹ For specimens of these hymns cf. Ch XX, pp 411-15
C5 semblelysma Gr. S, I. 248
2 For the English translation of the hymn cf Ch XX pp 413-14
5 HH., I, p. 180
C H. Pl., 1p p 118 ft.
7 S.BE, XI.III, pp xiv-xxiv
S. Belvalkar and Ranade, HIP, II. p 84 For further clucidation of this topic see

CHAPTER XXIII

SOCIAL AND ECONOMIC CONDITIONS

1. SOCIAL CONDITIONS

1. Family Life

The very use of the term kula, which does not occur as an uncompounded word before the period of the Brähmanas, suggests a system of individual families, each consisting of several members, under the headship of the father or eldest brother to whom belongs the kula (originally 'home or house of the family,' then by metonymy 'the family' itself). As distinguished from gotra it seems to mean the undivided family living under one roof.

The case of the sale of Sunahsepa in the Attareya Bröhmana (VII. 12-18) suggests that the son was under the absolute control of the father, but the story may only reflect the horror evoked by the father's heartless treatment of his son. The father as a rule did not arrange the marriage of his son or daughter (Jaimmiya Upanishad-Bröhmana, III. 12. 2). The relationship between father and son was one of great affection The kissing of a grown-up son on the head on important occasions as a token of love is a custom found in Sähkhäyana Aranyaka. Adoption was resorted to, not only in the absence of natural children, but also to secure the addition of a specially qualified member to the family, as in Visvämitra's adoption of Sunahsena.

Certain special terms show that it was considered improper for younger brothers and sisters to marry before their elders. The brother and his wife played the part of guardians of the sister in the absence of the father. Quarrels between brothers are mentioned. The family was sometimes large enough to include the great-grandfather as well as the great-grandsons. Among relations are mentioned the wife's brother, the sister's son, the cousin (bhrātrivya), the maternal uncle, etc.

An entire hymn in the Atharvaveda is devoted to the praise of hospitality (IX. 6), and the Attareya Aranyaka also lays stress on it. The guest-offering is an integral part of the daily ritual of the household.

2. The Caste-System

The term varia is used definitely in the sense of "caste," without reference to colour, in this age. The system of Caste, whose beginnings may be traced in the broad fourfold classification of society in the Rigwedic age (ante, pp. 387 ff.), developed during this period in various directions. Many causes contributed to the rise

of sub-castes and other caste-divisions. Guilds of workers tended to crystallize into castes, as occupations became more or less hereditary; as examples we may cite the chariot-makers, the smiths, the leather-workers, and the carpenters. The peculiar family constitution or the gotra tradition, whereby exogamy as well as endogamy regulated marriage connections, and whereby a man should normally marry a woman of equal birth, i.e. within his caste, but not of the same gens or within the gotra, was another factor in the development of complications and distinctions in the Caste-System. The original race-feeling or the contrast which the Arya varna (Vedic Aryans) felt between themselves and the Dasyu-varna (aborigines), and which was sought to be mitigated by the incorporation of the conquered population into the framework of Aryan society by admitting them into the fourth class or caste, left its mark in the shape of the rule of hypergamy, whereby an Aryan could marry a Śūdra wife but the Sudra never an Arvan wife. The same rule was also gradually applied in marriages between the three Aryan classes. and while a Brahmana would normally marry a Kshatriya or a Vaiśya girl, and the Kshatriya, a Vaiśya girl, the male of a lower class could not ordinarily marry a girl of a higher class. This peculiar feeling as to mixed marriages is fundamental to all castedivisions, and may be looked upon as the third factor in caste elaboration during this age

As has been noted in Chapter XIX (p. 400), it was the third caste-group, that of the Vaisyas (called also vis or vvija), which by virtue of its occupations came into the closest touch with the fourth caste-group, that of the Sūdras. The latter was continually receiving accretions from the conquered aboriginal population and could not therefore keep up its cultural purity to the Aryan level. There arose, therefore, the necessity of clearly distinguishing the Aryan Vaisya from the Sūdra who was a doubtful Aryan. An evidence of this precaution is seen in the variants of caste-names for the last two groups, namely as Arya and Sūdra, found in some passages in the Taittiriya, Kāṭhaka, Vējasaneyi, and Atharvaveda Saii-hitās

Along with their functions and duties, the privileges and status of the four castes were being differentiated minutely in the religious and social spheres. The Satapatha Brāhmaņa prescribes varying sizes of funeral mounds for the four castes. The deities to whom victims of the different castes are offered in the Purushamedha are different. Different degrees of politeness are noticed in the modes of address prescribed for the four castes.

The Südra class was naturally the hardest hit in these invidious distinctions, but the texts are not consistent in the position they assign to it. If, for example, the Satapatha (III. 1. 10) says that a Südra is not worthy of being addressed by a consecrated person,

the stories of Satyakāma Jābāla and Jānaáruti in the Upanishada show that the teaching of philosophy was not withheld from him. The Sūdra cannot milk the cow for the Agmhotra-milk according to the Kāṭhaka Sāmhitā (XXXI. 2), but the Sātapatha Brāhmata (V. 5. 4. 9) gives the Sūdra a place in the Soma sacrifice, and the Taittiriya Brāhmata prescribes formulae for establishing the sacrificial fire for the rathakāra also who was counted a Sūdra. The Atāreya Brāhmana, however, lays down the most reactionary doctrine. It describes the Sūdra as yathā-kāma-vadhya (fit to be beaten with impunity), who could be expelled at will and who is always the servant of another. It is also declared that the Sūdra has no rights of property as against the rājanya, especially the king. How far these extreme views were actually followed in practice it is difficult to say.

The Vasiya class (Vii) was engaged in agriculture, pastoral pursuits, industry, and trade, and paid tribute to the king and the nobles, in return for the protection given to them. A late passage (VII. 29. 3) in the Attareya Brāhmana gives rather a low estimate of him with reference to the Kshatriya, when it says that 'the is to be lived on by another and to be oppressed at will." Although things might not have been really so bad as this, there is no doubt that the position of the Vaisya was steadily deteriorating in this age.

The Kshatriya class was composed of the king's relations, his nobility, his retainers and other chiefs of petty states. They fought for the protection of the country and maintained peace. They received revenue in kind from the people or masses (the Vaisyas mainly) during war. For their normal or peace-time subsistence some of them were probably granted villages, because the Grāmanī seems to have been more often a nominee of the king rather than a popularly elected officer, and probably the post was hereditary in such cases. Others had their lands cultivated by tenants. In war, they were helped by the people, who fought alongside them.

While it is generally recognized that the Brāhmana and the Kahatriya have undoubted precedence over the Vaisiya and Sūdra, there is not the same unanimity in respect of the relative position of the first two.\(^1\) The more common view is that the Brāhmana is superior to the king, as recorded in the Vājazaneyi Samhitta (XXI. 21) and the Satapatha, Aitareya and Paūchavimāa Brāhmanas. The Brāhmana is dependent on the king (Satapatha Br. 1. 2. 3. 3) and takes a lower seat by his side, but is superior to the king. A Kahatriya can never get along without a Brāhmana while a Brāhmana can; nay, the power of the Kahatriya is derived from the Brāhmana (Satapatha Br. IV. 1. 4, 6; XII. 7. 3. 12). On the other hand, the Kāḥhata Samhitta (XXVIII. 5) says that the Kshatriya is superior to the Brāhmana, while the Aitareya Br. (VII. 29) rates the Brāh-

mana rather low, describing him as a receiver (of gifts), a drinker (of Soma) and as lable to be removed at will (by the king). Though this is not the common view of this age it explains some facts very satisfactorily; the fact, for example, that many kings were seers of hymna and sacrificers, and some of them were even instructors of Brähmans in the Brahmanical lore.

Brahmanas are contrasted with the members of the three other castes as the privileged eaters of the oblation. According to some scholars the Brahmanas were divided into two classes—the Purohitas of the kings, who guided their employers by their counsel. and the ordinary village priests, who led quiet lives.2 In the view of the present writer these were not separate classes as such. Any one of the ordinary priests could come into contact with the king when they were engaged in some great festival and could be selected for the post of Purchita, if found pre-eminent and distinguished for his learning. The post remained hereditary, only if the son was as well qualified as the father. Imprecations against royal oppressors of Brahmanas in the Atharvaveda and the statement therein that kings that persecute the Brahmanas do not prosper, suggest on the one hand that the persecution of Brahmanas was not unknown, and on the other, the gradual consolidation of the prestige of the priesthood. Even though a passage in the Astareya Br. (VII. 29, 4) exalts the Rajanya above the Brahmana whom (it says) the former can control, the references to the visah only, as the subjects of the king (Tāndya Brāhmana), suggest that the Brāhmana class received preferential treatment and enjoyed certain privileges and exemptions denied to the other caste-groups. The greed and cunning of the Brāhmanas and many prerogatives claimed by them are reflected in the Atharvaveda and other texts (ante, pp. 412, 422), but they may not be a true picture of the class as a whole. There can be hardly any doubt that many of them deserved the highest position in society by their character and intellect

The most glaring evil of the caste-system, namely the doctrine of the impurity communicated by the touch or contact of lower castes (known as "untouchability" today), had not yet reared its ugly head. Restrictions on inter-dining are known, but not on the basis of caste. Great importance is attached to purity of descent in the Sainhitäs and Brähmanas, but there are instances of Brähmanas of impure descent such as Kavasha, Vatsa, and Satyakāma Jābāla. On the whole it is quite clear that caste had not yet become a rigid system, and none of the three factors which definitely characterize it today, viz., prohibition of inter-dining and inter-marriage, and determination by hereditary descent, was yet established on a secure basis.

3. Marriage and the Position of Women

There are evidences that marriage did not normally take place before puberty. As regards restrictions on marriage, it was banned

within the circle of agnates and cognates, but the Satapatha Brahmore (I. 8. 3. 6) allows marriages within the third or fourth degree on either side. Though marriage within the gotra was not explicitly prohibited, marriage outside the gotta must have been more frequent. Brothers and sisters were not to marry before their elders; so the order of birth was generally respected. The re-marriage of a widow was allowed, as seen from the Atharvaveda IX. 5, 27, 28. Polygamy undoubtedly prevailed. The Maitrayavi Samhita mentions the ten wives of Manu. The king has four wives, the mahish? (the official or chief wife), the favourite one (vavata), the parivrkts or the neglected one (owing to the absence of a son?), and the pālāgalī (daughter of a court official?). The instances of Kavasha and Vatsa, as well as that of Janasruti in the Chhandoqua Upanishad, who offers his daughter in marriage to a Brahmana, indicate that hypergamy was permitted during this period. The wife wedded first must necessarily have claimed all the privileges of a wife in the religious and social life of the couple, but the two wives of Yajñavalkya were apparently on a footing of equality. The verses from the Atharvaveda quoted above (p. 412) indicate the prevalence of polyandry. Conjugal morality generally stood on a high level, but the infidelity of the wife was certainly not unknown. The ritual of the Varunapraghasa (in the Maitrayani Samhita and the Satapatha and the Taittiriya Brahmanas), in which the wife of the sacrificer is questioned as regards her lovers, is evidently a rite to expiate unchastity (even platonic or purely mental) on the part of the wife. The son of a Kumārīputra (son of a maiden) is mentioned in the Vājasaneyi Samhitā which refers also to illicit unions of Sūdras and Arvas, both male and female. But all these may be looked upon rather as exceptions that prove the rule of a high standard of ordinary sexual morality. The metronymics in the lists of teachers in the Brihadarawaka Upanishad may be explained as the relic of an ancient sociological feature rather than as evidence of recognized immorality. After all the society is human, and while we should not entertain highly exaggerated notions of unfailing chastity during the age, disproportionate importance need not be attached to isolated cases, or peculiar and exceptional customs and institutions.

The sale of a daughter was known, but viewed with disfavour. Dowries were generally given. The various types of marriage detailed in the later law books had not been formulated as yet. The story of Chyavana in the Jaiminiya Brāhmana is an instance of the gift of a maiden for services rendered. The elements of the marriage ceremony described in the marriage-hymn of the Rigueda are reproduced without much change in the corresponding Atharvavedahymn, which adds only one important feature, which later became essential, namely the bridegroom causing the bride to mount a stone before grasping her hand. The poetic picture of an ideal

family life in which the newly-wedded wife becomes the mistress of her husband's home, as depicted in the Rigueda, holds true for the texts of this period also, and this ideal was possibly often realized. The term paisi regularly applied to the wife in the Brāhmaṇas is indicative of her equal share in the social and religious side of the husband's life, while the term pāyā refers only to her conjugal position. Gradually, however, she lost this important position, as priest was more and more employed to offer the oblations in certain ceremonies instead of the wife. This deterioration of her status and dignity went so far as to result in woman being classed with dice and wine, as one of the three chief evils (Maiträyent Sanhitia, III. 6. 3). On the whole, judging from references in the Taittiriya (VI. 5. 8. 2) and the Kāphaka Sanhitiā, it appears clearly that woman, who held a high position in the age of the Rigueda Sanhitā, had fallen on evil days in this age (ante. Ch. XX. p. 424).

It is true that sometimes high praise is showered on her in the texts of this period. Thus it is said that she is half her husband and completes him (Satapatha Br. V. 2. 1. 10). But in spite of this praise she is not allowed to take part in political life, by attending the assembly like men. According to the Aliaraya Brāhmana (III. 24. 7), a good woman is one who does not talk back. In the Satapatha, there is actually the rule that the wife should dine after her husband. The relative position of the two sexes is reflected in the keen desire for male progeny. This may be regarded as natural in a partiarchal society where relationship was recognized through the father. But this natural predilection exceeds all bounds of propriety or morality when we read in the Altaraya Brāhmana (VII. 15) that a daughter is a source of misery and a son alone can be the saviour of the family. The Atharvaveda (VII. 13) also deplores the birth of daughters

The Atherouveda (XVIII. 3. 1) merely refers to the ancient practice of satis (window-burning) and the Rigneda does not countenance it. So it appears that this custom was not very prevalent during the Vedic age. The Vedic texts also tacitly admit the non-existence of the custom, by discussing the question of widow remarriage, which is permitted by some texts and prohibited by others.

4. Education

With the development and elaboration of the institution of the sacrifice and the growth of a vast literature connected with it, the problem of the preservation of this literature became very acute, particularly because during the age under discussion the whole of it (the Samhitās and Brāhmanas, including the Aranyakas and Upanishads appended to them) was looked upon as Sruti or revealed literature. The Vedic literature must therefore have formed the

chief subject of instruction and the vital part of education. Naturally, then, the process of imparting the knowledge of the sacred hymnology and sacrificial ritual must have become more and more systematized during this age. Literary education was transmitted only orally, i.e by word of mouth from teacher to pupil. We find an echo of this system in the famous frog-hymn of the Rigreda, quoted above (ante, p. 349). The art of writing was very probably known to the Vedic Indians, 3 but that it played no part in the educational system of ancient India is accepted by all.

The Atharvaveda (XI. 5) refers to a brahmacharin (Vedic student) gathering sacred fuel for fire-worship and bringing alms (begged from door to door) to the teacher. There are also prayers in the AV for liturgical employment at the ceremony of Initiation (Upanayana). Svädhyäya or the daily portion or lesson of Vedic study is referred to in the Samhitas of the Yajurveda. In the Kathaka Samhita, a rite for the benefit of one who, though not a Brahmana, has recited or studied the vidyā, is mentioned, and the wellknown fact that Kshatriya kings like Janaka were not only keen students of the Vedas, but also great philosophers renders it almost certain that members of the Kshatriya and Vaisya castes received the sacrament of the Upanayana and went through part (at least) of the period of studentship, although normally the Kshatriya would study the art of war. Vedic study, service to the teacher, and chastity were the principal duties of a brahmacharin. The fairly detailed description of the Upanayana as a sacrament (samskara) in the Satapatha Br. (XI. 3, 3, 1-7) includes all the essential features of the same sacrament and life of studentship which are treated at length in the Grihya-sütras, such as: (1) The formal acceptance of the pupil by the teacher at the request of the former; (2) the entrusting of the pupil to the care of certain deities; (3) the vows and duties to be discharged by the pupil while residing at the house of the guru, such as: putting fuel on the fire, sipping water, and begging alms; (4) the dress of the pupil consisting of the ajina, the girdle, etc. The description of young Angirasa teaching his elders, in the Tandya Br. (XIII. 3, 23-4), and the stories of Nabhanedishtha and Bhāradvāja in the Aitareya and Taittirīya Brāhmanas, give us a vivid picture of the educational system of those days, with its insistence on truthfulness, observance of duty (dharma), devotion to the āchārya or guru (preceptor) and to one's parents, hospitality, faith, and generosity. The Taittiriua Aranuaka even anticipates some minute directions of the type given in the Grihya-sūtras, such as: the pupil should not run while it is raining, nor urinate in water, nor bathe naked, etc.

Women probably took part in the intellectual life of the society, but we have no such definite reference in the later Samhitā and Brāhmana texts as we get in the Upanishads. From the Taittirīua

Samhitā (VI. 1. 6. 5), the Maitrāyavā Samhitā (III. 7. 3) and the Satapatha Br., we know that women were taught to dance and to sing, which appear to be recognized feminine accomplishments.

Among subjects of study figured arithmetic, grammar, and prosody (Tāṇdya Br.). Language was obviously an important subject of study, since Northerners are mentioned as experts in language and grammar.

There was then no system of state education. The Brāhmaṇa teachers taught students of the three higher castes at their houses, giving them free board and lodging. In return, the pupils served the teacher and gave him fees (guru-dakshirā). That the education in this Home University was not merely literary, but also included physical and moral training, is seen from the hard daily routine of the pupil and the code of moral conduct prescribed for him, while residing with the teacher.

The existence of Vedic schools in this age, that is, even before the establishment of Sutra-charanas, is clear evidence that even in these early times, centres of Vedic learning presided over by a celebrated Vedic teacher were scattered all over the country. The Sāmaveda Sūtras refer to Brāhmana-charanas (schools) and as many as fifteen charanas of the Vajasaneyins are known, including the Kanva and Madhyamdina ones that have survived. The only Samhitä-chargras known are those of the Bashkalas and Sakalas for the Rigveda Samhitā. The separate Samhitā-and Brāhmana-charanas originated owing to a difference in the texts of the Samhitas and Brähmanas respectively. Whatever we might think of Max Müller's theory of the origin of Samhita- and Brahmana-charanas, it is important to note that numerous Vedic schools existed all over the country. The example of the assembly of the learned in the court of Janaka shows that debates (philosophical and literary) were often held under royal auspices

5. Amusements and Entertainments

Music, both vocal and instrumental, and dancing continue to be among the amusements of this age. An Esmaneda is a standing monument to the wonderful skill and originality of the ancients in the science of vocal music. Several professional musicians are known, and the variety of instrumental music in vogue can be inferred from the types of musicians enumerated, such as lute-players, fute-players, conch-blowers, drummers, etc. Among the musical instruments known are the äphäti (cymbal) to accompany dancing (RV and AV), drums, flutes, and lutes of various types, and the harp or lyre with a hundred strings (vāva). Many other instruments, of which we cannot form an exact idea, are also named.

The Sailūsha, included in the list of victims at the Purushamedha in the Vājasaneyi Samhitā, probably means an "actor" or

"dancer." There is a theory that a precursor of the later classical drama existed in this period, support being lent to this view by the supposed reference to the Nata-sütras in Pāṇini.

How deeply racing (especially chariot-racing) had entered into the popular scheme of entertainment is seen from its ritual transformation into a ceremony which, by sympathetic magic, secures the success of the sacrificer. The essential part of the Vajapeya ceremony is a chariot-race, in which the sacrificer is made victorious. Horse-racing was a favourite amusement. A semi-circular course and prizes for such a race are mentioned in the Atharvaveda. A formal race is also a feature of the Rajasuva ritual. Dicing was another popular amusement. The number of dice, the method of dice-playing, and the names of the throws are all described in detail in the various texts of this period. A ritual game of dice is played at the Agnyadheya and the Rajasuya ceremonies. So gambling is probably sought to be restricted by elevating racing and dicing to the rank of religious ceremonies. It is interesting to note that a vanisa-nartin, "pole-dancer" or "acrobat," is mentioned in the Yajurveda.

6. Food and Drink

Various eatables are mentioned in the texts of this period. The apūpa is a cake mixed with ghī (clarified butter) or made of rice or barley; odana is a mess, generally of grain cooked with milk. Special varieties are those made with water, milk, curds or ghī, and beans, sesame or meat, and named appropriately, such as "tilaudana," etc. A porridge made of grain, barley or sesame unhusked, slightly parched and kneaded, is called Karambha. Rice cooked with milk and with beans is mentioned in the Satapatha Brāhmata and the Vājasaneyi Sanhhtā. Fried grains of rice were known. Barley-gruel (yavāgū) and decoctions of other grains are also referred to.

Meat-eating seems to be fairly common, as in the Rigvedic age. The Satapatha Brāhmara prescribes the killing of a great ox or goat in honour of a guest. Generally meat was eaten on the occasion of some ceremony or other, but such ceremonies were performed almost every day. Its use is forbidden during the observance of a vow. It appears that the killing of cows gradually came into disfavour. The normal meat-diet consisted of the flesh of the sheep, the goat and the ox, the usual sacrificial victims. What man ate, he offered to the gods.

Among the chief products of milk may be mentioned clotted curds (āmikāhā), sour milk (dadhi), fresh butter (nava-nīta), pe-yasyā or curds consisting of a mixture of sour milk and hot or cold fresh milk, butter, mixed with sour milk (prishad-ājya), phāspa, creamy butter or the first clotted lumps produced by churning,

and finally various, a mixture of hot fresh milk with sour milk. This formidable list of milk-products and their mixtures shows the great popularity of milk as a drink.

Surd, an intoxicating spirituous liquor already known in the Rigwedic age, is often mentioned. Though tolerated as an ordinary drink (the drink of the people in the sabhā), it is often condemned as leading to quarrels and as seducing men from the path of virtue like dicing and meat-eating (AV, VI, 70.1). The Sautrāmani sacrifice is of the nature of an expiation or penance for an indulgence in surd. The method of its preparation cannot be ascertained. Probably it was prepared from fermented grains and plants. It was kept in skins. The Yajurveda Sanhītās mention a beverage called māsara, which appears to have been a mixture of rice and śyśmika with grass and parched barley, etc. Madhu primarily means "sweet" as an adjective, and so denotes any sweet food or drinks such as the Soma or milk. The sense "honey," though known in the Rigveda, is only now its most definite sense, and there are taboos against its use by students and women under certain circumstances

Already in the Brāhmaṇa period, the real Soma plant was difficult to obtain, and so substitutes were being allowed. For example, the Pañchavim'a Brāhmaṇa (IX. 5. 3) suggests that if pātikā, a substitute for the Soma, cannot be procured, arjunāni may be used as a substitute for the Soma In the Yajurveda, the plant is ceremoniously purchased before it is pressed. The plant was sometimes subjected to the technical process of āpyāyana (causing to swell) by being steeped in water, thus increasing its yield of juice These few details, culled from the texts of our period, supplement the almost exhaustive description of the preparation of the Soma which can be gathered from the Rigreda (ante, p. 378)

7. Dress and Decoration

Ornā-sitra (woollen thread) is repeatedly mentioned in the later Sanhitiās and Brāhmaņas, but ūrnā denoted not merely sheep's wool but probably goat's hair also. Clothes were generally woven of sheep's wool. The fondness of the Vedic people for ornamental or embroidered garments was as keen as in later periods. The dreas in this period seems to have consisted of three garments—an under-garment (nūri), a garment proper (vāsas), and an orber-garment (adhi-vāsas), like a mantle or cloak. The Satapatha Brāhmava describes the set of sacrificial garments as consisting of a silk undergarment (ushvīsha). The turban was worn by men as well as by women. A royal head çear or turban is worn at the Rājasūya and Vājapeya ceremonies by the king. The turban of the Vrātya is referred to. The "sandal" or "shoe" was made of boar-skin (Satapatha Br.). The combination of dārdopānaha ("staff and sandale") is

mentioned in the Kaushitaki Brāhmana. Skins were used as clothing. The frequent use of the variant terms for "warp" and "woof" shows the great development of the art of weaving garments.

The pra-phāta or closely woven ends of a cloth to which is attached the trimming, fringe, or border of a garment (daśā) is mentioned. The Śānkhdyana Āravyaka (XI. 4) refers to a garment of (dyed with?) saffron. But uncoloured woollen garments are also mentioned (Śatapatha Br.). From the manner of wearing the sacred thread outside, can be inferred the manner of wearing the ver-garment which probably passed over the left shoulder and under the right arm. The Śatapatha Brāhmaya (XI. 5. 1. 1) has an interesting legend to explain why man alone wears clothes. So none but the ascetics could go naked.

The Taittiviya Brāhmayā mentions an article called Sthāgara, probably an ornament made of a fragrant substance. Salait, the quill of the porcupine, is used now for parting the hair and anointing the eyes. The Saākha or conch-shell is used as an amulet (AV.). The late Shadwinia Brāhmaya (V. 6) mentions the pearl (Vi-muktā). A jewel (mayā) strung on a thread was worn round the neck as an amulet. The prā-kāja, an ornament of metal or a metal mirror, is often mentioned in the Brāhmanas. The pra-varta in the Atharvaveda (XV. 2. 5, 9, etc.) probably means an ear-ring. A nishka of silver (an ornament worn round the neck) as worn by the Vrātvas is mentioned in the Paāchaviniás Brāhmaya.

8. Knowledge of Medicine

The inclusion of a physician in the list of victims at the Purushamedha in the Vājasaneyi Samhitā (XXX. 10) and Taittirīya Brāhmana (III, 4, 4, 1) shows that the profession of the physician had already become well established. But whereas the profession was held in high esteem in the Rigveda-the Asvins being called "physicians"-a dislike for it seems to have developed in this age, because in some Samhita and Brahmana texts of the Yajurveda, the Asvins are looked down upon because as physicians they have to mix too freely with men. From the Atharvaveda one can say that although their treatment of diseases is somewhat primitive, consisting as it does of the use of herbs in combination with spells and of water-remedies Indo-European in character-their knowledge of pathology is anything but elementary. The Atharvaveda enumerates quite a large variety of diseases and the demons supposed to cause them. Takman (a kind of fever) is the subject of five hymns of the Atharvaveda and is also often mentioned elsewhere. But it is in the Atharvaveda that its symptoms are described in detail (ante, p. 418). Consumption, scrofula, dysentery, boils, swellings, convulsions, ulcers, rheumatism, headache, jaundice, cramps, eye-diseases, senility, fractures

and wounds, bites of snakes and other harmful insects, poison in general, lunacy, and leprosy are the diseases mentioned in the Atherbutzeda. The use of sandbags to stop bleeding is interesting. The practice of dissecting animals at the sacrifice was a great help to the knowledge of anatomy which was developed to an appreciable extent. Finally may be noted an interesting remark in the \$\frac{3}{4}\text{chipana Brihmana (V. I) that "sickness is particularly prevalent at the junction of the seasons"—a very accurate observation indeed.

2. ECONOMIC CONDITION

1. Agriculture and Cattle

According to various texts, such as the Atharvaveda, Vajasanevi. Maitrāyanī. Taittirīya, and Kāthaka Samhitās, and the Taittirīya and the Satapatha Brahmanas, six, eight, twelve, and even twentyfour oxen were used to drag the plough which must have been large and heavy. The oxen were yoked and harnessed with traces and guided by the goad of the ploughman. The furrow (sitā) is often mentioned. The value of the natural manure of animals in the field was very much appreciated (AV). Dung (śakrit) and dry cow-dung (karisha) are often mentioned. The plough is described as having a smooth handle, well-lying and lance-pointed (paviravat). There is a special name kināśa for the ploughman or cultivator of the soil. The Atharvaveda gives the credit of introducing the art of ploughing to Prithi Vainya, but ploughing is constantly referred to in the texts of this period as practised by the Vedic Aryans, the Vratyas who were outside the pale of the Vedic religion being described as not cultivating the soil. The Satapatha Br. enumerates the various operations of agriculture, as "ploughing, sowing, reaping, and threshing" The ripe grain was cut with a sickle. From the Taittiriya Samhita and other texts we gather that yava (meaning "barley" now) sown in winter was harvested in summer, that rice sown in the rains ripened in autumn, and that beans and sesamum planted at the time of the summer rains ripened in winter. Wheat was known and is distinguished from rice (vrihi) and barley. Groats (saktavah) made of wheat-grain are mentioned. Cultivation suffered from the usual pests—the moles that destroyed the seed and the other creatures that harmed the tender shoots. Evidently to prevent these and similar evils the cultivators used charms at the time of both sowing seed and gathering corn (ante, p. 416). Similar other spells in the Atharvaveda to avert drought and excess of rains show that these inevitable mishaps threatened agriculture then (as now) in spite of some sort of a system of irrigation that sought to minimize its evil effects.

Draft-oxen were generally castrated. Female draft-cattle also were used. A four-year-old ox or cow (turyavih) is mentioned in

the Tastiriya, Maitrāyavi, and Vājasaneyi Samhitās. The milchcow (dhenu) is contrasted with the bull, and there are special terms for cows, oxen, and calves of different ages, for cows barren or otherwise and in various stages of growth and motherhood, as well as for a cow with a calf substituted for one of her own which had died.

A fairly long hymn in the Athervoused shows the reverence inspired by the cow, and the death penalty prescribed for cowkilling outside the sacrificial enclosure tells the same tale. Pasture-lands were carefully looked after, and large sheds or stalls were exected for accommodating cattle. On the whole, the cowwere taken extremely good care of. The origin of the sanctity of the cow lay in the inestimable value of the cow for purposes other than eating, and the occasional mythological identification of the cow with the earth or Aditi helped the process which culminated in the full-fledged delification of the cow in later times.

2 Trade and Commerce

Rich Vaisvas (śreshthins), who had acquired wealth in trade or agriculture, and who were probably the headmen of guilds, are often referred to. That money-lending was a flourishing business is indicated in various ways. Kusidin is a designation of the usurer in the Satapatha Br., and Kusida has the sense of a "loan" in the Taittiriya Samhitā. The rate of interest is not specified. No regular system of currency or coinage appears to have been introduced vet, as no coins definitely belonging to this period have been unearthed and no specific and undoubted reference to coins occurs in the literature of the period. The mana is a measure of weight equivalent to the Krishnala (i.e. the berry of the gunia) which was a unit of weight. The satamana, a piece of gold equivalent in weight to a hundred Krishnalas, must have been in use as currency among the merchants. The nishka also had become by now a unit of value in addition to the old-time unit, the cow The profession of the merchant was often hereditary, as the term pāvija ("son of a vavij") in the sense of a merchant shows. The haggling of the market, already known in the Rigvedic age, had now become such a pronounced feature of commerce that a whole hymn of the Atharvaveda (III. 15) aims at procuring success in trade through clever bargaining. Garments, coverlets, and goatskins are among the articles of commerce and market commodities (AV).

The sea was undoubtedly known and there was probably some amount of sea-borne trade. In the texts of this period, samudra is frequently used in the definite sense of the "sea." The Aitareya Brāhmaṇa speaks of the "inexhaustible sea" (V. 16. 7) and "the seas as entreline the earth." The eastern and western oceans

(mentioned in the Satapatha Brāhmaņa) are probably references to the Indian Ocean and the Arabian Sea.

3. Occupations and Industries

The principal occupations and professions and the various arts and crafts were distributed among, and assigned to, the various groups of people in accordance with the scheme of the cast-system, which had by now taken root in Vedic society and was being elaborated and complicated by the rise of mixed castes. For example, agricultural and pastoral pursuits were mainly in the hands of the Valsyas. The professions of teaching and officiating as priests at the serifices (Srauta or Grihya) were confined to the Brahmanas. The fighting profession was mainly the monopoly of the Rajanya or Kshatriya class Service of all kinds—menial or otherwise—fell to the lot of the fourth class—that of the Súdras. This is but a rough distribution, and the division was not rigidly adhered to, a member of one caste not rarely following the occupation of another.

Although hunting did not form the chief source of livelihood of any particular class, it was practised for procuring sustemance and for the protection of herds and flocks from wild beasts; and it was also occasionally indulged in as a pastime and sport, chiefly by members of the Rājanya class, as in the Rigwedic age (ante, p. 401) Among the victims at the Purusha-medha are found many curious technical names of persons maintaining themselves on hunting and fishing. Birds were caught in nets (jāla) and the net was fastened on pegs (AV, X 1 30, VIII. 8. 5).

Fortunately a very comprehensive list of the professions, occupations, arts, crafts, and industries of this period is to be found in the list of victims at the Purusha-medha as given in the Vajasaneyi Samhitā (XXX) and the Tattiriva Brahmana (III. 4). The anu-Kshattri, a special type of attendant on the doorkeeper or on the charioteer, the anu-chara, an attendant in general, a drummer, a worker in thorns cut up and used to plait mats, a smith, a ploughman, an astrologer, a cow-killer (or butcher?), a herdsman, a maker of bow-strings, a carpenter, a gatherer of wood, a fire-watcher (dava-pa), a hand-clapper, who presumably scared away birds from the fields by making a noise, a female embroiderer or a basket-maker, a jeweller, the yoker and unyoker of horses, the maker of sura, an elephant-keeper and a worker in gold-all these figure in the list of victims in the Purushamedha. In the other texts of this age are mentioned a few additional callings, viz., a ferryman or poleman, a washerman (mala-ga), a menial (purusha), a potter, a usurer or money-lender, a blower, a barber, a boat-propeller, a cook, a messenger, and a footman running by the side of a chariot. To this multiplicity of occupations must be added the arts and crafts

mentioned in Chapter XIX, as there was no appreciable break in the economic life of the Vedic Arvans from the age of the Riggeda Samhitā down to the age of the Brahmanas, save that there was a more extensive knowledge and use of different kinds of metals.

4. House-Building and Means of Transport

The "House" (harmya) was large enough to contain not only a large family, but also pens for cattle and sheep, and evidently had many rooms with a special place for the Garhapatya fire which was kept continuously burning. The door with a fastener is often mentioned. Houses apparently were generally built of wood as in the Rigyedic period. The method of constructing them is not definitely known. Probably four pillars were erected, propped up by beams leaning against them at an angle. Ribs of bamboo-cane (vāmsa), a ridge, and a net or thatched covering over the bamboo ribs probably made up the roof. Grass in bundles was used to fill in the walls which were finished with reed work. The dhanadhānī ("treasure-house") mentioned in the Tattirīva Āranvaka (X. 67) probably indicates a special type of room or house. The Atharvaveda mentions patninām sadana or a part of the house called women's quarters. A seat with a pillow or cushion or coverlet, a bed, and a couch are among the articles of furniture mentioned.

As regards means of transport, the draft wagon (anas) is distinguished from the chariot (ratha) used for war and sport. The axle-box of a conveyance is mentioned. Since the Atharvaveda (XV, 2. 1) mentions vi-patha, a rough vehicle used for bad tracks, it can be inferred that there were some well-made roads. The wagon was drawn by oxen generally, but riding of horses and elephants was in use. Ships and boats plying on rivers and seas were a popular mode of transport.

For a detailed discussion on the relation between the Brishmans and Kahatriyas in this age, of Chobadi, History of Hinde Political Theories, pp. 44-52. 2 Ved Ind., II, p. 255, CHI, I, pp. 127-8.

Cf. the author's paper "The spoken words in Sanskrit Literature" (BDCRI, IV) Cf. also Dr. S. K. Chatterji's view (ante, p. 157) There is, however, a sharp difference of opinion on the antiquity of the art of writing in sancein India (ante, p. 395).

4. These three are referred to as the threefold Silpa in the Kaushitaki Brahmana.



BOOK SEVEN

The age of the upanishads and $s\overline{u}$ tras

CHAPTER XXIV

LANGUAGE AND LITERATURE

I. THE UPANISHADS

THE word upanishad is derived from the root "upa-ni-sad" which means "to sit down near some one." This no doubt refers to the upull's situng down near his teacher at the time of instruction. The prefix "upa" may also be taken to connote the pupil's "approaching" the teacher to request him to impart his doctrine. The word in course of time gathered round it the sense of secret communication or doctrine which was imparted at such sittings. Later on the word also came to be applied to the texts which incorporated such doctrines.

The number of treatises called Upanishads is quite large, but some of them are not quite as old as the others. The oldest Upanishads are partly included in the Aranyakas or the "forest texts" and partly appended to them. As a branch of Vedic literature even these texts are regarded as "breathed out" by Brahman and only "visioned" by the Vedic seers. The Upanishads are usually called Vedānta, or "the end of the Veda," not only because they came at the end of the Vedic period, or that they were taught at the end of Vedic instruction, but also because the later philosophers found in them the final aim of the Veda."

As noted above (Ch. XX, p. 424), some of the Upanishadic texts in fact form the component parts of the Brāhmaņas. These are the Aitareya Upanishad, the Kaushitaki Upanishad, the Taitiriya Upanishad, the Mahānārāyana Upanishad, the Brihadāranyaka Upanishad, the Chhāndogya Upanishad, and the Kena Upanishad. All these Upanishads, with the exception of only the Mahānārāyana Upanishad, belong to the earliest stage in the development of these texts. They are very much akin to the prose of the Brāhmaṇas and are certainly older than Buddha and Pāṇini.

The second category of the Upanishads represents a slightly themselves from the first category in their form which is mostly or entirely metrical. Then, again, these texts have very often come down to us as independent texts. To this category belong the Katha, the Svetäivatara, the Mahānārāyava, the Ma, the Mundaka and the Praina Upanishads. Though these texts also expound the Vedanta doctrine, they are not altogether free from Sankhya and Yoga view-points.

The Maitrayaviya Upanishad which is attributed to a school of the Black Yajurveda and the Mandukya Upanishad of the Atharva-

veda belong to the post-Buddhistre period. Their language, style, and contents show a later origin, and the great philosopher Sankara does not mention them. But due to their connection with certain Vedic schools they may be styled, together with the twelve mentioned above, as Vedic Upanishads.

The remaining Upanishads which have come down to us either independently or in larger collections have very little connection with the Veda Some of them contain very little that may be called philosophical, and some are more akin to the Puranas and the Tantras than to the Veda. According to their purpose and contents the non-Vedic Upanishads may be divided into six categories: (1) such as present Vedanta doctrines. (2) those which teach Yoga, (3) those extolling the ascetic life, (4) those which glorify Vishnu as the highest deity, (5) those which give the same position to Siva, and (6) the Upanishads of the Śāktas and other minor sects. Some of these, like the Jabala Upanishad quoted by Sankara, the Paramaharisa Upanishad, the Subāla Upanishad quoted by Rāmānuja, the Garbha Upanishad, the Atharvasiras Upanishad already mentioned in the Dharma-sūtras as a sacred text, and the Vajrasūchikā Upanishad may perhaps belong to a greater antiquity than the rest. All these Upanishads are generally called the Upanishads of the Atharvaveda, perhaps because it was easier to refer them to that Veda, their connection with the other Vedas not being easily demonstrable, and because the Atharvaveda itself was shrouded in comparative obscurity and mystery. The total number of the Upanishads is very large, and one of the latest, the Muktika Upanishad, enumerates 108 Upanishads classified according to the four Vedas.

The position of the Upanishads at the end of Vedic literature should by no means be taken to indicate that the intelligentsia of the period began to interest itself in philosophical speculations only when they got wearied of their earlier ritualistic activities. The Upanishads are in fact the legitimate development of that scepticism, the earliest traces of which are found even in the Rigvedic hymns. Though these treatises mark the culmination of the earlier line of investigation into the nature of the ultimate reality, yet, due to the nature of their subject matter and the genuine spirit in which the enquiry is carried on, they also constitute a beginning in this direction. The spirit of their contents being anti-ritualistic, it may be quite legitimate to suppose that the earlier philosophical activity originated with those outside the pale of the priestly class.

It is also evident that the Kshatriyas took a leading part in this new line of enquiry They had now secured a firm footing in the land by defeating the non-Aryans and, as noted above (Ch. XXI. p. 434), obtained a high status and pre-eminent position in society as ruling chiefs and high administrative officials. We can easily quess how the intelligent Kshatriyas with their restless mentality

LANGUAGE AND LITERATURE

had grown jealous of the Brāhmaṇas and attempted to gain a tactical superiority over them by assigning a deeper significance and meaning to the very sacrificial rites which were elaborately developed by them as the principal element in their religion. That the early philosophical thoughts in the Vedic literature had their origin in the intelligent interpretation which was sought to be put on what might otherwise appear as meaningless Vedic ritual, is abundantly clear. The various discussions between the Kshatriyas and the Brāhmaṇas recorded in the Upanishads leave no reasonable doubt about it.

This supposition is completely borne out by the evidence we gather from the Vedic literature. The references in the Brähmana texts already inform us that the members of the warrior class had betaken themselves to enquire into the true significance of sacrifice The story of king Janaka of Videha and the sage Yāiñavalkva, which appears in the eleventh book of the Satapatha Brahmana, is the most instructive in this respect. It shows no doubt the superiority of the warrior-intellect over the priestly one, at least in some isolated instances, but it also proves that even then the warriors as a class were regarded as intellectually inferior to the priestly class (who had as it were appropriated the monopoly of thinking), and as such were not always expected to interfere in intellectual matters. But when we come to the Upanishads we find that the members of the non-priestly class grew more and more inquisitive into the true nature of the world Thus in the Chhandogya Upanishad (IV, 1-3), Raikva, a "Brāhmana" not by caste but by his knowledge, instructs king Janasruti. The same Upanishad (IV. 4) shows Satvakāma Jābāla, of dubious descent, to be a worthy recipient of knowledge as he does not swerve from the truth. The king Praváhana instructs the Brahmana Gautama in the new doctrine of transmigration (Chhandogua, V. 3, etc.). This story, together with the one in which king Asvapati Kaikeva instructs five Brāhmanas in the doctrine of Atman (Chhāndogya, V. 11. ff.), shows that these two doctrines which did not go well with Brahmanical theology were first conceived among the warrior class.

The principal contents of the Upanishads, at any rate of the more important among them, are philosophical speculations. The philosophers of the Upanishads are actively interested in an earnest enquiry into the ultimate truth that lies behind the world of creation. They have variously expressed their findings in the identity of Brahman—that highest principle which manifests itself in the Brahman—that highest principle which manifests itself in the of dissolution—and Atman which is the individual self. This has been pointedly recorded in the famous dictum of identity "Tat tourn asi," where "fat," meaning "that," stands for Brahman, and through

it the universe, and "tvam," meaning "thou," for Atman or the individual self.

To quote the words of an Upanishadic sage on the point:

"This my Atman in my inmost heart is smaller than a grain of rice, or a barley corn, or a mustard seed, or a millet grain...
This my Atman in my inmost heart is greater than the earth, greater than the sky, greater than the heavens, greater than all spheres. In him are all actions, all wishes, all smells, all tastes; he holds this All enclosed within himself; he speaks not, he troubles about nothing.—
this my Atman in my inmost heart, is this Brahman. With him, when I depart out of this life, shall I be united. For him to whom this knowledge has come, for him, indeed, there exists no doubt. Thus spake Sāndilya, vea. Sāndilya."

The famous story of Uddālaka Āruni and his son Svetaketu shows us how in that period the learning of the Vedas, without learning that doctrine "by which that which is unheard becomes heard. unthought becomes thought, and unknown becomes known," was regarded as futile This doctrine was expounded by the father to his son. We are told that originally only the Existent was here without a Second. It then developed into the material world by itself. With Atman it penetrated into all beings, and therefore when a man dies he is united again with the Existent. As the juices collected by the bees lose consciousness of their diversity. similarly all the creatures when combined in the Existent lose consciousness of the multiplicity of their forms in the universe; just as from the invisible quintessence of the seed springs up the huge fig-tree, so also from the minute ultimate reality proceeds the diverse world: just as the salt dissolved in water cannot be seen and vet its presence can be felt by taste, similarly the Existent, though invisible, is present in the world and can be realized by the consciousness of "tat tvam asi." The true nature of Atman is explained in the Chhandogya Upanishad not as the Purusha in the eye or in the reflected image, not as the spirit that roams in the dreams, not even as the soul in the dreamless and profound sleep, but as the immortal and intelligent spirit in man.6

The ethical doctrine of Karman, connected with the doctrine of transmigration, is beautifully developed in the Brihadāranyaka Upanishad. With pointed examples the doctrine is thus set forth:—

". Just as an embroidress undoes a small portion of a piece of embroidery, and out of it creates a different, quite new and more beautiful design, so man, when he has stripped off his body and has rid himself of non-knowledge, creates for himself a different, quite new and more beautiful form, that of the spirit of an ancestor or of a Gandharva, of a Brahman or of a Prajāpati, of a god or of a man, or that of that some other being... As he has acted, as he has

LANGUAGE AND LITERATURE

lived, so he becomes; he who has done good, is born again as a good one, he who has done evil, is born again as an evil one. He becomes good through good action, bad through bad action. Therefore it is said: 'Man here is formed entirely out of his desire, and according to his desire, and action is his destiny.'" The ethical basis of the Upanishadic doctrine as expressed in the simile 'As water does not stick to the leaf of a lotus-flower, so evil action does not stick to him who knows this (that the Self is Brahman)" (Chhāndogya, IV. 14. 3) is not to be construed to mean that knower was given all laxity. The simile rather shows that the knower was regarded as inherently incanable of evil actions.

The spirit of sincerity permeates throughout these philosophical chapters in Indian literature. The knowers are as earnest in their search after truth as the ignorant are anxious to know what is beyond. Their eager quest is expressed in the Brihadāranyaka, I. 3. 28: "From the unreal lead me to the real. From darkness lead me to light. From death lead me to immortality." All distinctions of caste, social status and earthly power are set aside when the highest knowledge is to be sought. The story of Nachiketas who prefers the knowledge of the ultimate reality to the pleasures of long life, long progeny and immense wealth and power is the best illustration to the point. Says he:—

"Ephemeral things! That which is a mortal's, O End-maker, Even the vigour (tejas) of all the powers, they wear away. Even a whole life is slight indeed.

—This, in truth, is the boon to be chosen by me . . .

This thing whereon they doubt, O Death: What there is in the great passing on—tell us that!"

What there is in the great passing on—tell us that!"

This earnest desire to know the truth above all is quite in keep-

ing with what was regarded as the highest object of life in those days, viz., seeking union with the Brahman. No work, however good, could help in effecting this union. The only means to achieve it was to realize the identity of the soul with the Brahman. This growing indifference to the pleasures of the world and belittling them when compared to the supreme joy to be experienced in the unity with the Brahman, however, laid the foundation of the profound pessimism which pervades later Indian thought and literature.

The enormous power which these philosophical poems have exercised over the minds of Indians for centuries together is not so much due to the fact that they were regarded as divine revelation, but because "... these old thinkers wrestle so earnestly for the truth, because in their philosophical poems the eternally unsatisfied

human yearning for knowledge has been expressed so fervently."
The Upanishads do not contain "superhuman conceptions," but human, absolutely human attempts to come nearer to the truth—and it is this which makes them so valuable to us. As to the influence of the Upanishads on humanity at large we may do no better than quote the view of a distinguished European scholar:—

"For the historian, however, who pursues the history of human thought, the Upanishads have a yet far greater significance. From the mystical doctrines of the Upanishads one current of thought may be traced to the mysticism of the Persian Sufism, to the mystic-theosophical logos-doctrine of the Neo-Platonics and the Alexandrian Christians down to the teachings of the Christian mystics Eckhart and Tauler, and finally to the philosophy of the great German mystic of the nineteenth century. Schopenhauer." 10

2 THE SUTRAS

The word sūtra, by which a special class of literature is designated, originally means "a thread." Secondarily it denotes that type of literature which is made up of short sentences running through a topic like a thread. A sūtra has thus come to mean a short rule, in as few words as possible, giving a clue to the learning stored in a particular topic forming a part of a particular book. Both by their form and object the Sutras form a class by themselves. The system of oral instruction which formed the basis of education in those days very probably necessitated this peculiar fashion of summarizing the entire exposition to help its easy memorizing. It is also not improbable that the intricacies of Vedic ritual, which were to be scrupulously observed in every small detail, contributed to a certain extent to the development of this form of literature. If, therefore, a non-initiate finds here clarity sacrificed at the altar of brevity, it is only natural. But the definition of a Sutra clearly says that a Sutra should be brief in form but at the same time unambiguous in its meaning (svalpāksharam = asandigdham . .).

The class of literature which comes under this head does not form part of the Vedic literature, but is in close association with it It is not the Veda, a divine revelation, but the Vedança, "the limbs of the Veda," constituting works of human authorship Though these Vedangas include a number of exegetical sciences like slissha (phonetics), Kalpa (ritual), Vyākaraṇa (grammar), Nirukta (etymology), Chhandas (metrics), and Jyotisha (astronomy), all of them have not come down to us in the stätra style. These six Vedāngas refer to the six subjects that help the proper understanding, recitation, and the sacrificial use of the Vedas Taken as a whole, therefore, the Sūtra form of literature is post-Vedic, as is also shown by its language. In contents, however, they may be traced back to the period of the Brāhmans which occasionally deal with etymology.

LANGUAGE AND LITERATURE

grammar, and astronomy alongside the ritual. Though some of the exemplars of this literary activity are later in date, the period which typifies this aphoristic literature may be taken to be pre-Buddhistic.

1. Sikshā

The traditional list enumerating the six Vedāṅgas assigns the first place to Śikshā or the science of phonetics. The word originally means only "instruction," and then specially such instruction as is imparted for the correct pronunciation, accentuation, etc., of the Vedic texts. These works are therefore closely related to the Saṁhitā texts, but in a way they are related to the ritual also; for in the performance of a sacrifice the correct recitation of the mantras has as much importance as the correct order of the sacrificial acts themselves. The Taittiriya Upanishad (1. 2) mentions this Vedāṅga for the first time, and the Sūtra texts belonging to it are at least as old as the Kalba-sūtras

The oldest text-books dealing with this science are the Prätiäkhyasi'i which, as their name suggests, belonged to every śäkhä
or recension of a Veduc Sainhitä. Thus we have at present a Rigveda Prätiääkhya ascribed to Saunaka, perhaps a later revision in
verse form of an earlier Sütra text, a Tattifvip Prätiääkhya Sütra, a
Vőjasaneji Prätiääkhya Sütra ascribed to Kätyäyana, and an
Atharoweda Prätiääkhya Sütra, supposed to belong to the school
of the Saunakas. The Pańchavidha Sütra shows the manner in
which the Sämans are to be sung at the sacrifice, and the Pushpasitra, a kind of Prätiäkhya, is meant for the Uttaragäna of the
Sämaveda. All these works instruct the students in the correct
promunciation, accent. euphonic changes which the sounds undergo
in the composition of words, and such other topics as come under
Vedic phonetics.

These texts are the earliest specimens, if we exclude the occasional excursions of the Brāhmaṇa texts in this field, of the activities of Indians in the science of linguistics. Moreover the rules with which they have fixed the manner of the Sanhitā recitation have helped in the accurate preservation of these texts even to the detail of a syllable. We need not doubt that the Rigoeda-Sanhitā, as we find it in our printed editions of today, is in any way different from the one which Saunaka learnt centuries ago from his teacher.

Of later origin and of much less importance are some short reatises on phonetics ascribed to such important persons as Bharadvija, Vyāsa, Vasishtha, and Yājānvalkya. The Vyāsa-šikshā, which is directly connected with the Taittirija Prātišūkhya, is comparatively older than the other works of similar nature. The Pātiniyašikshā may be old in its contents though its present form is rather late

Closely related to the Vedänga literature, though not actually forming part of it, are the Anukramanös or "lists" or "catalogues." To Saunaka are ascribed the catalogues of the Rigveda hymns as well as of their Rishis, their metre, and their detites. The Sarvā-nukramavi of Kāṣṇṣṇana is a work in the Sūtra form giving for the Rigveda the first words of every hymn, the number of verses, the name and the family of the hymn's Rishi, the deities, and the metre. The Bṛihaddevatā, ascribed to Saunaka, gives in a metrical form not only a catalogue of the gods worshipped in the different hymns of the Rugveda, but also myths and legends connected with these deities The work on account of its antiquity, is therefore important from the point of view of the development of narrative literature in India. The Rigvidhāna, again ascribed to Saunaka, gives in a form similar to that of the Bṛihaddevatā the magic power that one can obtain by reculting the hymns or the verses of the Rigveda.

2. Kalpa

The oldest Sütra works are the Kalpa-sütras which deal with the ritual and are thus directly connected with the Brähmanas and the Aranyakas. According to the subject-matter dealt with they are divided into two branches, the Śrauta-sūtras and the Grihyastiras. The former deal with the great rites taught in the Brähmanas and involving the services of a number of priests, whereas the latter teach the domestic sacrifices and other duties in the dail life of a householder. The former are so called as they are based on Sruti, but both the Grihya- and the Dharma-sütras are called Smärta, as they are based on Sruti (tradition).

The Srauta-sutras teach the laying of the three sacred sacrificial fires, the new and full moon sacrifices, the animal sacrifices and the Soma sacrifice with its manifold varieties. These texts are highly valuable, not only for the understanding of the cult of the sacrifice, but also for the study of the history of religion.

The Grihya-sūtras on the other hand cover a comparatively wider field, since they give instructions regarding the various ceremonies that are to be performed at the different stages in the life of a person. The order of arrangement in a Grihya-sūtra is determined by its subject-matter which refers to the ideal life of a householder. Most of them begin with the marriage ceremony and then go on to describe those that are connected with the birth of a child, beginning with the ceremonies performed at the time of conception. The various other ceremonies such as Annapräsan (first taking of rice), Chūddkarava (tonsure), Upanayara (initiation), etc., are then described in the order of their natural sequence, the funeral rites naturally coming at the end. There are thus described a large number of domestic customs and usages, and in this respect the value of the Gribya-sütras to the student of anient folk-love can

LANGUAGE AND LITERATURE

never be over-estimated. These customs have their parallels in the manners and customs of the other Indo-European peoples, a fact which goes to prove that "the relationship of the Indo-European peoples is not limited to language, but that these peoples, related in language, have also preserved common features from prehistoric times in their manners and customs." 12

The Grihya-sūtras also describe the five "great sacrifices," i.e. the daily sacrifices to the gods, demons, fathers, man and the Brahman. The first three of these comprise the simple offerings of food and a libation of water, whereas the "sacrifice to man" is nothing but hospitality shown to a guest, and the "sacrifice to the Brahman" constitutes the daily study of the Veda. Further, these texts also deal with the customs and ceremonies connected with such occasional and seasonal functions as house-building, farming, gardening, and digging of tanks and wells, as also the magical rites that are designed to ward off evil omens (e.g., if a dove or owl sits on the house or the bees make honey therein) or to cure the ailing of disease. and love magic. Connected with the funeral rites are also the ancestral sacrifices (srāddhas) which by their importance soon developed into special texts known as the Sraddhakalpas. In spite of the minor differences in detail the Grihva texts show a remarkable uniformity in the household ritual of the orthodox Arvans in those days. With regard to the Grihva and Srauta ceremonies Max Müller observes that ". . though the latter (i.e Srauta) may seem of greater importance to the Brahmanas, to us the former will be more deeply interesting, as disclosing that deep-rooted tendency in the heart of man to bring the chief events of human life in connection with a higher power, and to give to our joys and sufferings a deeper significance and a religious sanctification."13

The third class of text-books which are perhaps a continuation of the Grihya-sūtras are the Dharma-sūtras dealing with the customary law and practice The difference (between the Dharma- and Grihva-sūtras) is that "the weight in the Dharmas is laid on the wider relation of man to the state, so that those sections which deal with the family become condensed and subordinate."14 They enumerate the duties of the castes and the stages in life (āśrama) in great detail. We also find here the beginnings of the civil and criminal law. The important subjects covering the civil law are taxes, inheritance and the position of women. Under the latter come assaults, adultery, and thefts as the principal topics. It must be noted that the rules of punishment are largely based upon casteconsiderations, so that for having committed the same offence, a Brāhmaņa may pass unscathed, but a Śūdra may even receive capital punishment. The differences of opinion that are noticeable in the different texts are due, partly to differences in their age and

locality of origin, and partly also to the various schools in which these texts were studied.

The fourth allied group of the Sūtras is that of the Sulvas-sūtras which are directly attached to the Srauta-sūtras. The word Sulva means "a measuring string," and these texts give minute rules regarding the measurement and construction of the fire-altars and the place of sacrifice. They may thus be regarded as the oldest books on Indian segment.

The Srauts- and the Grihya-sūtras are also of great value from the point of view of the correct understanding of the Vedic passages. These Sütras, besides giving instructions for the mechanics of the ritual, also enjoin the use of certain Vedic mantras for recitation. It is true that very often the mantras show little connection, except perhaps the verbal, with the sacrificial acts which they are to accompany; but sometimes they do supply a clue to the correct explanation of a prescribed text. Such mantras are included either in full or in part in the body of the Sütra texts and thus exhibit their connection with certain Vedic schools; for the Sutras belonging to a particular Samhitā would quote passages from that particular Samhita only with some initial words, but with the full text of the mantras taken from other Samhitas. The Gobhila Grihuasūtra, however, eschews all such mantras and puts them in a special prayer-book called the Mantrabrahmana, and the Apastambiya Grihva-sūtra does the same in the Mantrapatha.

Of all the different Vedic schools only the Baudhäyana and the Apastamba schools, belonging to the Black Yejurveda, give under the general title of Kalpa-sūtra all the four types of Sūtra texts mentioned above. The uniformity which runs through them makes it quite probable that Baudhäyana's and Apastamba were themselves actual authors of these two Kalpa-sūtras. The schools of Bhārad-sīja which give us the Srauta and the Grihya-sūtras and those of Satyāshāḍha Hiranyakeśin which give us the Srauta-, Grihya- and the Dharma-sūtras are both in close relation with the school of Apastamba. To the Maitrāyasī-Sanhāt belong the Srauta-, Grihya- and the Sulva-sūtras of the Mānava school and also the Kāṭhaka Grihya-sūtras

Of the other Vedic schools we do not get, at any rate at present, a Kalpa-sütte comprising all the four types of Sütras referred to above. Whether they existed at one time or not is a moot point. Thus to the White Yajurveda belong a Kātyāyana Srauta-sūtra, a Bēraskara Grihya-sūtra and a Kātyāyana Sulva-sūtra. The Aśvalā-yana and Sāikhāyana Srauta-and Grihya-sūtras belong to the Rioveda. With the Sāmaveda are connected the Lātyāyana and Drāhyāyara Srauta-sūtras and a Srauta- and Grihya-sūtra of the Jaiminīya school. The Grihya-sūtras of Gobbila and Khādīra also belong to the same Veda The Atharvaveda gives a Voitāna Śrauta-

LANGUAGE AND LITERATURE

sătra and Kausika-sütra. The former is of a very late date and is tacked on to the Atharvaveda in order to bring it in line with the other Vedas. The latter, however, is much older in date and in character is only partly a Grihya-sütra, for it deals with magical rites also

The Śrāddnkalpas and Pitrimedhas dealing with the ancestral sacrifices have been already referred to above. Some of these texts, however, are quite late productions. The important texts belonging to this category are the Mānava-śrāddhakalpa and those belonging to Śsunska, Psippslaida, Kāryāyana, and Gautama. Of the Piṭrimedha-sūtras we have those of Baudhāyana, Hiranyakeśin, and Gautama

To the post-Veduc ritual literature belong the Parisishtas or "addenda" which elaborate in greater detail some of the rites that are briefly mentioned in the texts to which they are appended. Of these, the Grihyasaingraha-Parisishta and the Karmapradipa attached to the Gobhita Grihya-sitra are more important. The Parisishtas belonging to the Atharvaveda are equally important since they throw valuable light on such subjects as the magical practices, omens, and portents. The Prāyaśchittasitra which deals with the expiatory rites is one of the oldest Parisishtas.

Still later are the Prayogas, Paddhatis, and the Kārikās dealing very elaborately with some special rites such as the marriage customs, burial of the dead, and sacrifices to the manes, but they do not belong to this period

It is difficult to assign any precise date to the Kalpa-sutra texts. The dates of the principal Śrauta-sūtras (viz., those of Apastamba. Aśvalāyana, Baudhāyana, Kātyāyana, Śānkhāyana, Lātyāyana, Drāhyāyana and Satyāshādha) and some of the Grihya-sūtras (Āśvalāyana, Apastamba, etc.), have been fixed between 800 and 400 B C The Dharma-sūtras of Gautama, Baudhāvana, Vasishtha and Apastamba have been placed by eminent scholars like Bühler and Jolly between the sixth and fourth (or third) centuries B C., though others assign a somewhat later date. But although none of the extant Dharma-sutras is older than 600 B.C., there is no doubt that there were works of this class belonging to an earlier period. For not only the oldest text, viz., Gautama Dharma-sūtra, probably belonging to sixth century B.C., refers, both directly and indirectly, to other works of this class, but even Yaska's Nirukta seems to allude to them. On the whole the Kalpa-sūtras may be roughly placed between the eighth and third centuries B.C. 18

Vyākaraņa

The only representative that has come down to us of this Vedanga is the Ashtadhyāyī of Pāṇini, which belongs to a later period.

The Vedic grammar in this work receives only a sectional treatment at the hands of Pāṇni, his principal object being the description of the "bhāskā," the ordinary language of the people, and not the sacred language of the "seers." The earlier exegetical works in this field are lost to us. The Upādisūtras teaching the formation of nouns from roots, and the Phiṣrūtras dealing with accent, are the representatives of the earlier treatises in the field of grammar before Pāṇni. The greater number of words explained by the Upādisūtras are Vedic, and Professor Max Müller observes that "... originally the Upādisūtras were intended for the Veda only, and that they were afterwards enlarged by adding rules on the formation of non-Vedic words." "!"

4. Nirukta

Of this Vedānga connected with etymology we have the sole representative in Yāska's Nirukta. It appears that some centuries after the composition of the Sanhitās, these texts began to be unntelligible, and to facilitate their understanding it was deemed necessary to have lists of rare and obscure words. These lists were styled the Nighanțus, and Yāska's treatise is a commentary on such lists, prepared not by himself but by his predecessors Yāska certainly had forerunners in this field who commented on such lists, but none of their works has come down to us.

5. Chhandas

The literature comprising this Vedānga on metries is equally wager. The Nidānasitra in ten Prapāṭhakas belongs to the Sāmaveda and deals with metre as also with the component parts of the Sāmaveda. It has been ascribed to Patāṇjali by some ancient teachers. Pingala's work on metrics is regarded by the indigenous tradition as a Vedānga of the Rigueda and Yajurveda. But it is a late work belonging to the early post-Vedic period since it deals with the Vedic as well as non-Vedic metres.

6. Jyotisha

There is no work available at present dealing with ancient astronomy in the sūtra style. The Jyotisha-Vedānga is a later work of a practical utility. It gives some rules for calculating and fixing the days and hours for the different sacrifices. It is really unfortunate that the earlier works of this Vedānga as also of others should have been lost to us. Some of the astronomical theories and mathematical calculations worked out by the Vedic Aryans are really startling, considering the age and surroundings in which they originated. But at present the only source is the Vedic Samhitās and the Brāhmanas, particularly of the Yajurveda, from which we may derive our knowledge of these.

LANGUAGE AND LITERATURE

3. THE LANGUAGE

1. The Upanishads

The language of the Upanishads is more akin to the Classical that to the Vedic Sanskrit. The following traces of the older usage are, however, noticed now and then: (a) Nom. Plural in "assa" of nouns ending in "a"; "Janāsaḥ" (Kaṭha, 1.1.19); (b) Nom. Plural in "ā" of neuter nouns ending in "a"; "trì cha śatā trì cha sahasrā" (Ērṭh. III. 9, 1); (c) Instru. Sing, in "ā" of Fem. nouns ending in "ā"; "deshā" (Chhānd. VI. 13. 1); "manīshā" (Kaṭha, II. 6, 9; Sve. III. 13); (d) Nom. Plural in "Is" of Fem. nouns ending in "I"; "mānu-shū," (Tatīt. III. 10, 2); (e) Loc. Sing. without termination of nouns ending in "an": "akshan" (Brih. II. 2. 2); "Ātman" (Brih. II. 3. 6; Kaṭha, II. 4. 1); "vyoman" (Tatīt. II. 1); (f) the older form of the pronoun "tat" nanely "yat" (Brih. II. 3. 1).

A peculiar practice of employing the Dative in place of Gen-Abla of some Fem. nouns ending in "a" or "i," as also of the pronouns "tat," "etat" and "yat" is noticed in the Upanishads: Thus we get "teshām samkliptyai" (= Abla) "varsham samkalpate" (Chhānd. VII. 4. 2); "bhātyai na pramaditavyam" (Tatit. I. 11. 1); "etasyai denatāyai sāyuiyam jayati" (Brih. I. 5. 23); "jayāyai kāmāya jāyā priyā bhavati" (Brih. II. 4. 5); "vīnāyai tu grahavena śabdo grihito bhavati" (Brih. IV. 5. 10); "tasyai vāchaḥ prithivi śariram" (Brih. I. 5. 11); "Asyai vidyutaḥ sarvāṇi bhātāmi madhu" (Brih. II. 5. 3); "yasyap rriyo bubhāshed yasyai vā' (Kaushi, II. 4).

In the case of the Verb, older Moods like the Subjunctive and the Injunctive have almost fallen into disuse. They are met with only as exceptions in the older Upanishads, i.e the Brih. and the Chhand, Thus we get "asat" (Brih. V. 5. 1); "ichchhasai" (Brih. VI. 1.10); "prāpam" (Brih. V. 14.7) and "upa sīdathāh" (Chhānd. VI.13. 1). Imperative forms in "tat" standing for the third person sing. are found twice in Brih.; "ayam tyasya rājā mūrdhānam vipātayatāt" (Brih. I. 3. 24) and "abhayam tvā gachchhatād Yājnavalkya" (Brih-IV. 2. 4). The Atmane and the Parasmai Padas are not yet definitely restricted to certain roots as in the Classical language and so we get forms like "adhyeti," "adhyeshi" (Chhānd. V. 11 2. 6); "adhīhi" (Chhand, VII, 1, 1); "manvani" (Chhand, VIII, 12, 5); "aikshat" (Katha, II. 4. 1). Irregular present forms like "bhuñjāmah" (Chhānd. IV. 12.2); "kṛiṇvate" (Sve. II. 7); perfect forms like "pasparsuh" (Kena. 27); passive forms like "vyasīryat" (Chhānd. V. 15-2) and "parimuchyanti" (Mund. III. 2. 6) are also occasionally met with. As in earlier Vedic Samhitas, prepositions are sometimes separated from their verbs: "para asya bhratrivyo bhavati" (Brih. I. 3. 7): "ud asmāt prānāh krāmanti" (Brih, II. 1. 11); "anu mā śādhi" (Bṛth. IV. 2. 1); "ā cha gachchheyuḥ upa cha nameyuḥ" (Chhānd. II. 1. 4).

Sandhi has become pretty regular so far as prose passages are concerned. A few irregularities of the Sandhi are found in the metrical portions.

The Upanishadic language is characterized by a few features whose presence is due to the need of conveying dry philosophical ideas with ease and clarity. Some of these are: (1) Abundant use of simple homely similes and metaphors; (2) repetition of an idea almost in the same words and expressions to ensure firm grasp and recollection; (3) use of riddle-like expressions which a man loves to master and reproduce with a feeling of superiority; (4) description of minute details to create and sustain interest; (5) short stories to attract attention before introducing a dry philosophical discussion; and (6) corroboration of a philosophical concept by means of popular beliefs and facts to excite curiosity and create faith

2. The Sūtras

As has been already noticed, the Sütra works are written in a peculiar terse style which may be traced to the prose of the Brāhmaṇas; for these latter texts are usually written in short sentences, almost entirely without the use of relative and conditional clauses. The Sütras, however, employ long compounds and gerunds to economize the use of syllables. It may be said on the whole that the language of the Sütras approaches very near to the norm set up by Pānini. Herein too are to be found occasionally words and forms belonging to the Vedic period and also some Prākritisms and solecisms. Yet the language of the Sütras does not show the same latitude as is evinced in the epic language

In phonology a possible change of "r" > "a" is exemplified in "anika" (< "rinika"?) (Ap. N. S. I. 6. 19. 1) The change of "n" > "s" so peculiar to the MIA stage may be witnessed in "pāma" (Ap. S. S. X. 14. 1), "enam" (Ap. S. S. XIV. 27. 7), "anulepana" (Ap. Dh. S. I. 3. 11. 13), etc. Some confusion between the sibilants is met with in "vasīyān" for "vasīyān" (Kau. S. 4. 15); "pāmšu" for "vasīyān" (Kau. S. 4. 15); "pāmšu" for "varīyān" (Kau. S. 4. 15); "pāmšu" for "varīyān" (Kau. S. 4. 16); "pāmšu" for "varīyān" (Kau. S. 4. 16); "pāmšu" for "carīyān" (Kau. S. 4. 10). Occasionally "y" is written for "j" as in "yunaymi" (Kau. S. 3. 1). Then again Tamil-Malayalam "p" for "g" is lound in "Kārali" (Jai. G. S. I. 14).

The dat. sg. of fem. nouns in "ā," "p" and "ū" has an ending "-ai" as in "dakehīnāgui" (Āp. S.S. II. 8. 3). The instr. sg. "vidyā" occurs in Āp. Dh. S. I. 11. 30. 3. In the same Sūtra II. 1. 1. 17-18 "dāra" is used in singular. The shortening of a long vowel before termi-

LANGUAGE AND LITERATURE

nations is found in "patnibhis" (Ap. S.S. 14. 15. 2), "grammibhis" (Ap. S.S. 20. 4. 3). The Brihaddevatā (II. 8, 12, III. 92) gives "patnayah" as nom. pl. The nom. pl. "gah" is found in Ap. S.S. 10. 26. 7. The loc. sg. in "-an" of the bases ending in "-an" is available in "ahan" (Ap. S.S. 9, 2, 1), "ātman" (Ap. S.S. 6, 28, 20; Kau. S. 72. 42). "dhāman" (Bau. S.S. 10. 59, etc.), "charman" (Bau. S.S. 6, 28, 15, 17).

The forms "ādadāti" (and "dadāti") for "ādatte" occur in the Vaikhānasa Smārta Sūtra 9. 2. 4, etc. The unaugmented forms occur very often in the Brihaddevata; cf. "bodhayat" (IV. 115), "sīdat" (IV. 113), etc. The optative in "-ita" is also met with, cf. "dayita" (Ap. S.S. 5. 25. 18), "prakshālaunta" Ap. Dh. S. I. 1. 2. 28), "dhāraunta" (Mānava G. S. I. 1. 10), "kāmayīta" (Bau. S.S. II. 1), "upanayīta" (Kau. S. 17. 31. 31, etc.). The opt. pl. "-iran" is found in "upakalpayiran (Bau. S. S. 25, 12).

Absolutives in "-am," a peculiarity often observed in the Brahmanas, are found in such instances as "anavakrāmam" (Ap. S.S. II. 13. 7), "abhishekam" (Bau. S. S. II. 9), "ayujakāram" (Hıranyakesi Pitrimedha Sūtra 2, 1). Other irregular forms of absolutives are "śchotya" (Kau. S. 53 18), "kshipya" (Kau. S. 30, 18) "tuājua" (Agnivesya G. S. 3 11 2), "santvya" (Brihaddevata, IV. 3), "samgrihītvā" (Brihaddevatā, II. 48).

In sandhi also occasional departure from the grammarian's norm is found in the removal of hiatus by crasis in "patnyanjalau" from "patnyā(h) anjalau" (Kau. S. 6. 17), "daivateti" from "daivata iti" < "daivate iti" (Kau. S. 6. 34, etc.).

¹ Winternitz, HIL, I, p 234.

² Mundaka Upanushad (I. 2. 7.) declares sacrifices as "unsafe boats" and the

² Mundaka Upanushad (I. 2. 7.) declares sacrifices as "unsafe boats" and the fools who cling to it go again to old age and death on what are we established? Overruded by whom, in pans and pleasures, do on what are we established? Overruded by whom, in pans and pleasures, do r. Y. by Hume, Thurteen Principal Upanisheds, p. 38. definition of the Chândogue, UI, 14 Th. by Winternit, Hill., I. p. 250.
5. Chândogue, UII, 14 Th. by Winternit, Hill., I. p. 250.
6. Chândogue, VIII, 74 Th. by Winternit, Hill., I. p. 250.
7. Brhoddrengales, IV. 4. 7r. by Winternita, Hill., I. p. 250.
8. Kajiskak Upanishad, I. 26 ff. Tr. by Hume, Thirseen Principal Upanishada, pp.

³⁴⁴ f.

^{9.} Aham Brahmā asmi (Brihadāranyaka, I. 4. 10).

Anem Brahma cam: (Dristonariuspasse), J. V. 207.
 Whitentik, H.L., 1, p. 266.
 The origin of the Prätsäkhyas is thus accounted for by Max Müller. "During the Brahmaps period the songs of the Veda were preserved by oral tradition only, and as the spoken ianguage of India had advanced and left the iddom of the Veda behind as a kind of antique and sacred utterance, it was difficult to ner veus Dennic as a sum of sinduce son secret discrement, it was difficult to preserve the proper pronunciation of the secred hymns without laying down a certain number of rules on metre, secent, and pronunciation in general. The necessity, however, of such a provision could hardly have been felt until certain

- differences had actually arisen in different seaks of Brahmanic learning."

 12 Winterstit, Hill., 1. p. 274 and fn. 2.

 13 HASL, second edition, p. 127.

 13 HASL, second edition, p. 285.

 13 HASL, second edition, p. 285.

 15 HASL, second edition, p. 285.

 16 Brahmanic and the Raddhayana is sometimes called a provochased-state, and that presochase is perhaps the term for a literary type which comes midway between the Brahmanas and the Stitras. See HIL, p. 278. fn. 3.

 15. For a detailed account of the Srauts-stitras, cf. Ch. XII, pp. 235. ff.

 17. Thus point has been discussed above, m Ch. XII. p. 285.

 18. KHDS, I, pp. 8-9, SBS, II, XIV, Introduction.

 19. Op. cft., p. 181.

CHAPTER XXV

POLITICAL AND LEGAL INSTITUTIONS

I. POLITICAL THEORY

The political and legal ideas of the period are presented to us, in a collected form, in the Dharma-sütras. This is a distinct advantage, as hitherto we had to depend for them merely on isolated passages scattered in the different Samhitäs and Brahmanes. Although none of the existing Dharma-sütras is probably older than 600 B.C., they are no doubt based on earlier works of this class and have preserved strata of earlier thought. It is remarkable that the older Dharma-sütras are singularly free from the revolutionary ideas in religious associated with Buddhism and other heterodox or sectarian religious sects, and do not contain any trace of the great territorial kingdoms which arose in India in the fifth and fourth centuries B.C. We are, therefore, justified in treating the Dharma-sütras as reflecting the ideas of the closing period of the Vedic Age.

The Dharma-sutras do not contain any systematic exposition of legal principles and political doctrines such as we find in the Dharmaśāstras and Arthaśāstras of the later age. Nor does their conception of law and politics conform to our present ideas on the subject. As we shall see later, they "cover far more than law and do not cover the whole of law." As regards politics they view the state or society as an organic whole, in which the different elements, such as the king and the people, play their part according to Dharma or Law, imposed or at least sanctioned by the Divine Will. Life is also regarded as a whole without any sharp distinction between public and private, or individual and collective. As a matter of fact the collective organization of society dominates over the idea of individual persons. Each individual has his duty and responsibility, rather than rights and privileges, fixed by law and custom, and this applies as much to the king as to his meanest subject. Each man has a recognized function, which he inherits as a member of a group rather than selects of his own accord. To perform this function successfully is his highest object in life, a duty not merely political, social and moral, but also religious in character. For on this depends not only his well-being in this life, but also his salvation in the next world. Like the modern collectivist theories (such as Fascism) this view raises society above individuals, and strikes at the very root of personality or individuality; but there is an important difference. For the allegiance here is not to any party or political principle, but to Dharma conceived as an eternal and im-

mutable Law or Order, which is divine in character and does not emanate from human will.

Such is the background against which the State is conceived in the Dharma-stira. It lays down the duty of the king and the people, and does not worry about the rights of the latter and checks against the tyranny of the former. For failure to do his duty the king is sure to be visited with adequate penalties both in this world (by way of expulsion) and the next. This was considered to be a sufficient deterrent, and we do not hear of the popular assemblies called sabhā and samiti which in days of old regulated the affairs of state and controlled the power of the king.

A comprehensive view is, however, taken of the life and duty of a king. A high intellectual and moral discipline and military training are prescribed for him. "He must be fully instructed in the threefold (sacred sciences) and in logic, and learn the management of chariots and the use of the bow; he shall be holy in acts and speech, pure, and of subdued senses." He shall not live better than his gurus and ministers. His essential functions and duties are "to protect the castes and orders in accordance with justice," and "to take measures for ensuring victory," specially when danger from foes threatens the kingdom. His duty of affording "protection to all created beings" is very liberally interpreted. He must support the learned Brahmanas and the poor and needy of all classes. and none in his realm must suffer hunger, sickness, cold, or heat, be it through want or intentionally. He must be impartial towards his subjects and do what is good for them. It is further laid down that "that king only takes care of the welfare of his subjects in whose dominions, be it in villages or forests, there is no danger from thieves" That this was no mere pious wish but conceived as a fundamental duty of the state, would appear from the injunction that if the stolen property is not recovered he shall pay its value out of the treasury.1 Save and except the legal taxes the king was not authorized "to take property for his own use from the inhabitants of his realm" (Vas. Dh. S. XIX. 14). The taxes were regarded as "pay" received by the king for protecting his subjects. It amounted to one-sixth (of their incomes or spiritual merit) (Bau. Dh. S. 1. 10. 18. 19).

The high position of the Brāhmaṇa in the State is indicated by several injunctions. According to Gautama (VIII. 1) "a king and a Brāhmaṇa deeply versed in the Vedas, these two uphold the moral order in the world." It is also declared (XI. 1) that the king is master of all, with the exception of the Brāhmaṇas. The Brāhmaṇas were also exempt from taxes. The Purohita or domestic priest exercised high power and privileges and the king was also to "take heed of that which astrologers and interpreters of omens" told him, for "the acquisition of wealth and security depended also upon that."

POLITICAL AND LEGAL INSTITUTIONS

The king had to act in religious and many other matters according to the advice of the Purchita. An interesting aspect of the dependence of the king on the Purohita even in military matters is seen in ritual literature. The Purchita guarantees success to the king's arms by his prayers. The view of Geldner2 that these prayers were offered in the sabhā or assembly-house, while the king fought on the battle-field, is not countenanced by the Grihya-sūtras. It is true that the Sānkhāyana Grihya-sūtra lays down that Vedic recitations were not to be carried on in any armycamp, but ritual actually steps forth on the field of battle, and the result is rather amusing In the Aśvalāyana Grihya-sūtra (III, 12) we find that "when a battle is beginning," the Purchita stands to the west of the king's charlot and mutters appropriate mantras from the Rigveda while he makes the king put on his armour and hands over to him bow and quiver. The Purohita also recites mantras over the horses, when the king actually starts for battle, and also when he ties to the king's arm the guard (by which the arm is protected against the bow-string). He then mounts on the royal chariot and the king repeats the mantras, while driving, touching the drum, and, finally, shooting off his arrows. It is also laid down that the king "should commence the battle in the formation invented by Aditya or by Usanas." It would almost appear that the ritual even dictated military tactics to the king.

The influence of the Purohita in moderating the autocratic zeal of the king cannot be lost sight of in any appraisal of the political theory of those days. The number of priests at the court of a king may be many, but there is only one Purohita. Nay, one Purohita may even do service for more than one king, for example Jala Jātū-karņya was the Purohita of the kings of Kāṣi, Videha, and Kosala, according to the Sāākhāyana Srauta-sūtra (XVI. 29. 5).

We also hear of an influential body of Brāhmaṇas forming a Parishad. Although its chief function was to advise the king on intricate and disputed points of law, it was probably a general body of advisers on all matters, religious, political, and judicial. For in a Sūtra of Pāṇini (V. 2. 112) the king is called Parishad-bala (one whose strength lies in Parishad), and we definitely hear of administrative functions exercised by Parishad in later times. This Parishad was composed of at least ten (Brāhmaṇas), viz., "four men who have completely studied the four Vedas, three men belonging to the three orders (a student, a householder, and an ascetic), one who knows the Mīmānsā, one who knows the Angas, and at eacher of the sacred law." These men must be "well instructed, skilled in reasoning, and free from covetousses."

The term Parishad has an interesting history. In the Upanishads it means "a gathering of specialists discussing problems of

philosophy"; in the Gobhila Grihya-rütra (III. 2. 40) it means a council sitting round a teacher. The use of this name in the Dharma-stras for an advisory body of the king in judicial and probably also administrative affairs, is perhaps significant of the changed conception of state and society, to which attention has been drawn above.

The Dharma-sūtras usually view the king as the primitive ruler of a petty state. There is a rule, for example, in Geutama (V. 30-31) that a Madhuparka (a mixture of curds and honey) should be offered to certain relations, if they come after a year, but to a king, who is a Srotriya (proficient in the Vedas), as often as he comes. But if the king is not a Srotriya, only a seat and water should be offered. Again a king was to make way for a Srotriya (Gau. Dh. S. VI. 25), a Brähmapa (Ap. Dh. S. II. 5, 11, 5-6) and a Snataka (Vaz. Dh. S. XIII. 59) Further, Gautama (XII. 43) implies and Apastamba (I. 9. 25. 4) expressly says that a king shall personally strike a thief with the cudgel carried by the latter.

These passages convey the idea of a petty chief. But there are others which indicate the greatness and majesty of the king. According to Apastamba (II. 10. 25. 2-15) he "shall cause to be built a town, a palace, with a hall in front of it, in the heart of the town, and an assembly-house at a little distance from it." The palace hall served as a guest-house, and provided rooms, a couch, food, and drink. The assembly-house was used for the purpose of playing dice, and men of the three higher castes were allowed to play there. Even this picture shows that the king was a homely ruler and did not occupy an isolated position of grandeur and majesty, such as is indicated by the pompous details of the Rajasuya and Asvamedha sacrifices described at great length in the Srauta-sütras. The king was, of course, entitled to the homage of all except the Brāhmanas and wielded great power and authority. There is one rule which throws considerable light on the status and position of the king. According to Vasishtha (II. 49, 50) all interest on moneys lent ceases to accrue on the death of the king and until the coronation of the new king. This is probably a recognition of the principle that the king represents the state, and all state-regulations derive their power and authority from him alone. This is an abstract principle of great importance, but we do not find its logical application in any other instance.

That kingship had come to be normally hereditary in the period of the Sūtras is seen from the tendency to associate the king's son in the monarchy—a tendency which has already received ritual sanction. The Aśvaldyana Śrauta-sūra, for example, in its description of the Rajastiya (IX. 3) tells us that the Hotri narrates the ākhyāna of Sunaḥṣepa to the anointed king seated with his son and ministers on a golden seat. That the monarchy was occasionally elec-

POLITICAL AND LEGAL INSTITUTIONS

tive is at the same time shown by the legend in the Nirukts (II. 10) of the Kuru Brothers, Devspi and Santanu, which, though of doubtful character as a legend, retains its value as evidence of the contemporary practice of selecting, as king, one member of the royal family to the exclusion of another less suitable in an emergency. The field of selection could also extend to the entire nobility.

The Sütra VI. 2. 59 in Pāṇini shows that a Brāhmaṇa could sometimes become a king. Again the sacrifices prescribed in the Srautasütras for an oppressed and disgruntied Rājanya or Vaisya to acquire supreme power suggest that kingly power was not very stable and kingship was not confined to the royal family.

The insecurity of royal power during this period is also illustrated by the many references to kings expelled (apa-nuldha) from their kingdoms and striving to regain their sovereignty by means of spells (Kaušika-sūtra, XVI. 30).

2. ADMINISTRATIVE ORGANIZATION

The duties of the king, briefly sketched in the Dharma-sütras, give us for the first time some definite idea of the scope of administration. His supreme duty, as noted above, was the protection of the people, and maintenance of the rules of Caste and Order. As a corollary to this, he must punish the thieves and other criminals as well as those who stray from the path of duty laid down in the Sastras. His authority and jurisdiction thus extended practically over the entire activities of his subjects. One of his most important duties was to decide legal disputes. He was to protect the interests of a minor until he attained majority. He was also to support learned priests, the widows of his soldiers, those who are exempt from taxes (to be specified later) and Brahmacharins. He must preserve fruit-bearing trees. He must make an equal division of the booty secured in battle and distribute it equitably among those who shared the risks of war with him. He must prevent the use of false weights and measures.

For carrying on the administration the king appointed a regular heirarchy of officers. According to Apastamba (II. 10. 28. 4) the king 'shall appoint men of the first three castes, who are pure and truthful, over villages and towns for the protection of the people. These officials were to appoint subordinates possessing the same qualities. They were to protect the towns and villages from thieves and must be made to repay what is stolen within their jurisdiction. These passages, though brief, hold out the picture of a regular administrative machinery which was set up for the security of life and property.

One of the most important branches of administration was that for the collection of taxes. The texts do not make it quite clear whether the same officials who protected the towns and yillages also

collected taxes, or if there were others specifically employed for the purpose. But in any case the long list of taxable commodities shows a developed state of administrative organization. We come across a general statement that the king was entitled to a sixth part of the income or spiritual merit of his subjects (Bau. Dh. S. 1, 10, 18, 1; Vas. Dh. S. 1. 42). But Gautama (X. 24-35) gives a long list of taxes. viz., one-sixth, one-eighth, or one-tenth of the agricultural produce, the variation probably being due to difference in the quality of land. one-fifth of cattle and gold, one-twentieth of merchandise, and onesixtieth of roots, fruits, flowers, medicinal herbs, honey, meat, grass, and firewood. The artisans and other manual workers had to do one day's work every month for the king, and there were similar rules in respect of owners of ships and carts. One-tenth was levied on goods imported by sea (Bau. Dh. S. 1, 10, 18, 14). Certain categories of persons were exempted from taxation. The list is a fairly large one and is differently given in the different Dharma-sūtras, this lack of uniformity being a general feature with respect to most of the topics treated. Exempt from taxation, according to Apastamba (II. 10. 10. 26. 10-17), are a learned priest, women (according to Vasishtha, only special categories of them like unmarried girls, wives of servants, widows who have rejoined their families, etc.), ascetics, students, infants, old men, the blind, dumb, deaf, and diseased persons, and Sudras who live by washing the feet. To this list Vasishtha (XIX. 23) adds one who has no protector, and a servant of the king.

As regards military matters, the king must be always prepared for war. He should lead his fighting hosts personally to battle, and be brave and fearless in the field. Very noteworthy is the high ethical standard of the rules of battle. The use of poisoned weapons is strictly prohibited. One must not kill those who are helpless, ask for mercy, or offer submission by eating grass like "cows" (which was the ancient equivalent of the "white flag").

The village was the basic administrative unit. The inhabitants of the village may be roughly classified into four groups. First may be mentioned the Brähmanas and the Kshatriyas who did not cultivate the land themselves, but some of whom had a proprietary interest in it by virtue of royal grants. Secondly there were the cultivating owners, mostly Vaisyas. To the third group belonged various artisans such as the chariot-makers (ratha-kāra), carpenters (takshan), miths (karmārs) and others who formed the bulk of the village population. Lastly there were the Sūdras and other labourers who tilled the soil or did other menial work as day-labourers. All equally were under the authority of the king, and had to render tribute in various forms, such as food or service, either to the king or to such members of the royal family or household who paid a vissit to the village. The head of the village was the Grömani

POLITICAL AND LEGAL INSTITUTIONS

(leader of the Grāma) who discharged military duties in times of war and civil duties in times of peace. Whether the post of the Grāmani was hereditary, and whether the officer was nominated by the king or elected by the village council, cannot be definitely stated. The varying local customs make it likely that all these modes of appointment in the case of a Grāmani were current in different parts of the country. The royal officials, mentioned above, who are said to have protected villages or towns, probably acted as police-officers and were different from Grāmanis.

Another official named in the Sūtra texts of this age (as also in the Samhitās and Brāhmaṇas), is the Sthapati. From the fact that the Srauta-sūtras of Kāṭyāyana (I. 1. 12) and Āpastamba (IX. 14. 12) mention a Nishāda-sthapati, the word may be understood in the sense of "Governor." Other passages in the same Srauta-sūtras, however, point to the "Chief Judge." It is very likely that the Sthapati combined in his office both the executive and judicial functions.

3. LAW AND LEGAL INSTITUTIONS

As we have seen above, there is no clear evidence in the earlier age of organized criminal justice administered by the king or by a judicial tribunal, and the prevalence of the system of wergeld (vaira-deya) rather suggests that the injured party took the law into its own hands. It is in this period that we for the first time meet with the theory that a crime is a disturbance of the public peace and that, therefore, the penalty for the crime in the shape of fine must be paid to the king or to a Brahmana authorized by him. Similarly it is in the Dharma-sutras that we find the real beginnings of civil and criminal law. But as already noted above, the conception of law was very different from that of the present day. There was no code of positive law emanating from the authority of the king. The Veda, the tradition (Smriti), and practice of those who know (the Veda) are said to be the threefold sources of law each evidently being superior to the one mentioned later), and "if authorities of equal force are conflicting, either may be followed at pleasure" (Gau. Dh. S. I. 1-4). This obviously left a great deal to be settled by usages, conventions, precedents and customs. No wonder, therefore, that the rules and customs of different castes, communities, families, and localities are expressly recognized as having the force of law. It is also laid down that the communities (vargas) of "cultivators, traders, herdsmen, money-lenders and artisans have authority to lay down rules for their respective classes" and a right to expound them in the royal court of justice (Gau. Dh. S. XI. 20-22; Vas. Dh. S. I. 17).

Further, many activities of social and religious nature, which lie beyond the jurisdiction of a modern law-court, are brought within

the scope of law, and penance and loss of caste are prescribed as penalties both for offences of this nature (e.g. eating the flesh of forbidden animals, neglect of the Vedas, drinking spirituous liquor, incest) as well as for heinous crimes such as theft, homicide, causing abortion, adultery, etc. (Ap. Dh. S. I. 7. 21. 8 ff; Gau. Dh. S. XXII). In some cases, penance and loss of caste are imposed in addition to other punishment, but in others they alone are prescribed, and penance is supposed to wash off the guilt of even the most heinous crimes like adultery with a teacher's wife or drinking spirituous liquor, for which death by a painful process is also laid down as an alternative punishment (Ap. Dh. S. I. 9. 25. 1.10).

That the king himself personally administered civil and criminal justice appears from certain indications in the Sūtras (Gau. Dh. S. XII. 43). The administration of justice was to be regulated by the Vedas, the Dharmasastras, the Angas, and Puranas (Gau Dh. S. XI. 19), due regard being paid to local and family usage or (in other words) to the laws of districts, castes, and families which the king must learn from those who in each case have authority to speak (Gau. Dh. S. XI. 20-22). It seems to have been permissible for the king to delegate his judicial authority or at least the supervision of punishments to a royal officer or a Rajanya who could act as an adhyaksha (overseer). Difficult cases were referred to the Parishad whose composition has been mentioned above. When it failed to arrive at any satisfactory solution in doubtful cases, the king referred the matter to a Srotriya or Brahmana of high learning (Gau. Dh. S. XXVIII, 50). The theory of danda ("the rod of punishment") as the symbol of penal powers vested in the king had now fully developed.

Under criminal law, assault, theft, and adultery are the main general topics discussed in the Dharma-sütras. The Nirukta (VI. 27) gives a list of seven sins ("crimes") among which the slaying of a bhrūva is mentioned. Bhrūva is generally interpreted as "empryo," but later tradition takes it to mean "Brāmanap" also. The killing of a Brāmmana alone is murder—the most heinous crime. The Vasishiha Dharma-sütra mentions cases of manslaughter where the slayer commits no crime by killing an assassin" (III. 15-18). The Apastamba Dharma-sütra (I. 10. 28. 1-3) discusses and defines "thett" as follows: "He who under any conditions whatsoever, covets (and takes) what belongs to another commits a theft (according to Kautsa, Hārīta, Pushkarasādi and Kænva), but some exceptions are noted by Vārahāyani. For example, food for a draught-ox or seeds ripening in the pod, if taken only in moderate quantities, do not constitute theft."

The punishment for theft is rather severe, sometimes even death. The thief with loosened hair and carrying a cudgel presents himself before the king. The king with his own hand hits him with that

POLITICAL AND LEGAL INSTITUTIONS

very cudgel. If the thief dies, he atones for his sin. The thief may explate his sin also by throwing himself into a fire or starving himself to death; but if he is forgiven by the king or if the king fails to strike him, the guilt falls on the king. It appears that this punishment of death became operative only when the thief was caught red-handed.

Generally speaking, physical chastisement or expulsion from the country was the penalty for crimes. The fines of the later age are known, but had not yet become systematized. Caste-interest is a factor in the regulation of the severity of the punishment. Whereas, for example, a Sudra would receive capital punishment with confiscation of his property for homicide or theft, a Brahmana would only be blinded. For abuse (or defamation) the amount of the fine varies with the caste of the offender and the offended party. With the gradual reduction of fines, according to the descending scale of caste of the offended, a Brahmana goes scot-free if he abuses a Śūdra; but "a Śūdra who intentionally reviles twice-born men by criminal abuse, or criminally assaults them with blows, shall be deprived of the limb with which he offends" (Gau. Dh. S. XII, 1). In general the discriminatory penalties and punishments laid down for the Sudras make painful reading (Ap. Dh. S. II. 10 27, 9, 14-15. etc.), and even if we assume that they were not usually resorted to in practice, they throw a lurid light on the arrogance of the upper classes and the helpless condition of the down-trodden lower grades of society. Some relics of barbarous punishments are preserved in the Dharma-sutras such, for example, as those prescribed by Apastamba for adultery (I. 9. 25. 1-2; I. 10. 28. 15). The penalties prescribed for deserting a wife are also rude and primitive. The husband has to put on an ass's skin, with the hair turned outside. and beg in seven houses, saving, "Give alms to him who forsook his wife." That shall be his livelihood for six months (Ap. Dh. S. I. 10. 28. 19; see below, Ch. XXVI, p. 506). A drinker of spirituous liquor is to drink boiling liquid until he dies (Ap. I. 9. 25. 3). One redeeming feature, however, should be mentioned. Gautama (XII. 17) prescribes that if a learned man offends, the punishment shall be very much increased. How one wishes that this very salutary principle were extended to considerations of caste, so that the discriminatory penalties would be just reversed!

The law of manslaughter shows that in spite of the public organization of criminal justice during the Sütra period, the system of private vengeance, moderated by the wergeld (vairadeys), was still in force. Thus although the crime of murdering a Brähmana is too heinous to be expiated by a wergeld, one thousand cows constitute the wergeld for killing a Kashatriya, one hundred cows in the case of a Vaiiya, and ten cows for killing a Südra (Ap. Dh. S.

I. 9. 24. 1-4). The cows are apparently to be a compensation to the relations of the murdered man so that they may not press for the punishment of death to the offender. Over and above this payment to the relations, Baudhäyana (I. 10. 19. 1. 2) prescribes the payment of a bull to the king, probably partly as appeasement for the infringement of his peace, and partly as reward for his intercession with the relations. Among other Aryan nations, too, this method of compensation for murder is found. The Apastamba Dharma-suitra (II. 5. 11. 3) alone mentions ordeals, but in a very general way.

Though dharma or law (civil and criminal) is properly the sphere of the Dharma-sūtras, we find occasional notices of certain legal topics in Sütra texts earlier than the Dharma-sütras. The Nirukta (III. 4) says that women were not entitled to partition or inheritance, and uses the technical term dayada "heir." the term daya being established soon after the Rigveda in the sense of "inheritance" or "a share of the father's property which is divided among his sons either during his life or after his death." Similarly the Sankhayana Srauta-satra (XV, 27, 3) refers to "inheritance" in the technical sense. The Grihya-sūtras again refer to courts of justice in connection with the vasikarana rite which aims at secretly winning over the court and the assessors or jurors to one's side. Failing this, the rite would seek to deprive the judge of the power of speech (so that no judgment could be delivered). The Grihyasūtras also touch upon legal matters incidentally, as when they state the rule that one of the occasions for kindling anew the domestic fire is the time of the division of the inheritance, or the rule that the site of a house should be undisputed property.

Detailed rules of inheritance of landed property occur for the first time in the Dharma-sūtras. A few typical and illustrative rules alone may be cited. Sapinda males (those related within six degrees) are heirs in default of near relations like sons, and Sakulyas (remote relations) inherit in default of Sapindas. The widow is not entitled to inheritance, though, according to some authorities, the wife's share consists of her ornaments and gifts from relations. According to Apastamba, a daughter inherits only in default of sons, teacher, or pupil. The king inherits in default of these, who are all expected to keep the spiritual good of the deceased in view while spending the inheritance. Very possibly, and more often than not (though not necessarily), the division of property took place during the lifetime of the owner, rather than after his death.

Some authorities hold that among sons only the eldest one inherits. Apastamba Dharma-süra (II. 6. 14. 7) refers to a local law whereby the eldest son receives (in some countries) gold or black cattle or the black produce of the soll(?), in other words the best chattel. But the rules in the Dharma-sütras are not consistent in

POLITICAL AND LEGAL INSTITUTIONS

this matter, and it is laid down also that the father may divide equally among all his sons.

Whereas earlier authorities are content with the mention of the vague term "sons" in the matter of inheritance, it is the latest Dharma-sutras like that of Vasishtha which give a classification of the "twelve" sons into two groups, (1) the heirs and kinsmen, and (2) kinsmen but not heirs, in the manner of the later formal lawbooks

The whole matter of inheritance is rather vague, there being no universal law regulating it. Different rules are given by the various texts and legal authorities, and they were evidently authoritative in different localities or families.

Lost property is to be proclaimed by a crier, and if the owner does not turn up within one year, the king takes it giving a certain percentage (25 per cent) to the finder, unless the latter is a Brahmana, who keeps the whole of it. All treasure-troves belong to the king, but the rules are not unanimous on the point, and whereas, according to one authority, any finder gets one-sixth, according to another authority, if the finder be a learned Brahmana, the king shall not take it (Vas. Dh. S. III. 13-14).

Title to property can be established by documents, witness, and possession. If the documents are at variance, the evidence of old men and of guilds and corporations may be called in (Vas. Dh. S. XVI. 10-15). The categories of property which are not lost, even though enjoyed by others, are interesting; viz., a pledge, a boundary. the property of minors, an (open) deposit, a sealed deposit, women, the property of a king (and) the wealth of a Srotriya. So women are property. Eight other kinds of property which have been enjoved by another person for ten years are lost to the owner (Vas. Dh. S. XVI. 17-18). The king himself is the trustee of the property of a minor.

The legal rate of interest is roughly the equivalent of fifteen per cent per annum; but the influence of caste is noticeable even in this matter, and different rates of interest are payable by different castes. Neither a Brahmana nor a Kshatriya may become a usurer. The lending business, therefore, was a sort of monopoly of the Vaisyas.

For the duties of the king enumerated above, cf. Geutama Dh. S. X. XI, and Apassamha Dh. S. II, 10, 25, 10-15.
 Ved. Sud., II, 135.
 The constitution of the Parishad is laid down, with slight variations, in Geu. Dh. S. XXVIII, 48-49; Vez. Dh. S. III. 29; Seu Dh. S. I. 1. 1. 7-8.

CHAPTER XXVI

RELIGION AND PHILOSOPHY

1. THE UPANISHADS!

Long before the period of the Brahmanas, the thought-ferment which culminated in the rich philosophical speculations of the Upanishads had come to the surface in certain RV-hymns (X, 129, etc.) which express doubts concerning the efficacy of the priestly cult and the current belief in gods. The philosophical hymns of the AV and some portions of the YV Samhitas carry on (though only in a symbolic form) the tradition of these sceptics and doubters. who were certainly not the priests. Not only in the Upanishads but also in the Brahmanas, there is clear evidence of the fact that kings and warriors share the honours, if not the monopoly, of the intellectual and literary harvest of these days with the Brahmanas who had to go to them very often for instruction. Nay, even women and people of doubtful parentage took part in this intellectual life and very often possessed the highest knowledge. It was probably these non-priestly circles opposed to the Brahmanic way of works (Karma-marga) that formed the chief recruiting ground for forest hermits and wandering ascetics, who kept aloof from the sacrificial ceremonial of the Brahmanas by renouncing the world and followed the "way of knowledge" (Jñāna-mārga). Buddhism represents, very probably, one fruit of such protestant activity. It was in the nature of things impossible that the Brahmanas should be confined to the opposite camp and, as noted above (Ch. XXII, p. 451), their supreme genius for compromise and adjustments of differences probably led later to the formulation of the wonderful theory of Aśramas or different stages of Arvan life. (1) In the first one lives with a teacher and learns the Veda as a Brahmachārin; (2) as a householder (Grihastha) he next founds a household, begets children and himself offers sacrifices (grihya and śrauta) or has them offered; (3) when grown old, he leaves his house and village for the forest, where as a Vanaprastha (forest-hermit) he offers only a minimum sacrificial service and devotes himself mainly to meditation upon the mystical and symbolical significance of the sacrifice. The Aranvakas, as noted above, are eminently suitable to the hermits as text-books. The oldest Upanishads speak of these Asramas only as three types or branches of life, but not as successive stages. It is only in the late Upanishads, the Great Epic, and the Dharmasastras, that the theory of successive stages of life is formulated and is developed further by the addition of a fourth stage, that of the Samnyasin who gives up even sacrifice, in fact, all good works,

RELIGION AND PHILOSOPHY

and as an ascetic, renounces the world to meditate on the Absolute (Brahman), with a view to realize it or achieve union with it. In the early period, the last two stages probably formed a single stage. Anyway, the unbelievers in ritualism who preferred the Jäänemärga to the Karma-märga of the priests were completely placated by this scheme, which allowed them scope in the last two stages or Aframas.

If one single doctrine were to be selected from the old Upanishads as representing the quintessence of Upanishadic philosophy, and if we were asked to sum it up in one sentence, that sentence would be: "The universe is Brahman, but the Brahman is the Atman." The conception of the world-soul, Atman has developed from that of the world-man (in the RV), and the earlier conception of the personal creator, Prajapati, has grown into the Upanishadic one of the impersonal source of all being, namely Brahman. The two streams meet in the following manner: Atman in the RV is "breath"; in the Brahmanas it comes to mean "self" or "soul," and through the identification of the Pranas (vital airs), which are supposed to be based on the Atman, with the gods, an Atman comes to be attributed to (and pervades) the universe (as in the Satapatha Br. XI. 2. 3), the conception having already attained to a high degree of abstraction. On the other hand. Brahman (neuter). which in the RV means only "prayer," or devotion, in the oldest Brāhmanas, signifies already "Universal holiness" as manifested in prayer, priest, and sacrifice; from this to the holy principle animating all nature in the Upanishads is but a short step. This word "Brahman" epitomizes, as it were, the whole evolution of religious and philosophical thought in India. This unity of Brahman (the cosmic principle) and Atman (the psychical principle) or (in other words) the identity of the individual Atman with the world-Atman expressed by the Upanishadic dictum "tat tvam asi" ("Thou art That"), is very tersely explained by Deussen:2 "The Brahman, the power which presents itself to us materialized in all existing things, which creates, sustains, preserves and receives back into itself again all worlds, this eternal, infinite, divine power is identical with the Atman, with that which, after stripping off everything external, we discover in ourselves as our real most essential being, our individual self, the soul." The Upanishads, piling, as they do, metaphor on metaphor on this conception, are unceasingly struggling to help an understanding of the true nature of the pantheistic Self. Ajātasatru explains to Gārgya Bālāki3 that the true Brahman is to be sought only in the knowing and intelligent Spirit (Purusha) in man, i.e. in the Atman (the self) out of which emanate all worlds, all gods, all beings. The Atman thus takes the place of the more personal Prajapati as a creative power. The beautiful dialogue between Yājňavalkya and Maitreyi (Brihadāravyaka Up. II. 4) expresses

the doctrine that the Atman is one with the Universe and that everything exists only in so far as it is the cognitive self. No wonder, one of the later Upanishads (Svetäšentar IV. 10) should contain the notion (which in later Vedänta became so prominent) that the material world is an illusion (mäyä), produced by Brahman as by a conjurer (mäyin).

Prāņa plays an important part in the psychology and metaphysics of the Upanishads. Prana is breath of life, life, or lifeprinciple. In the singular Prava is a frequent appellation of the Atman. A favourite theme with the Upanishads is a description of this Prana, which is identical with the intelligent Self, and of its relations to the Pranas (plural), i.e. the organs of the soul (breath, speech, sight, hearing, and the organ of thinking). The reciprocal action between these organs of the soul and the corresponding five forces of Nature-wind, fire, the sun, the quarters of heaven and the moon-is also often touched upon This explains the frequently recurring psychological fable of the quarrel among the Pranas regarding seniority. This Prana doctrine is also responsible for much poetic speculation on the vicissitudes of the individual Atman in the conditions of waking, sleeping, dreaming, and death, and its wanderings in the Beyond, up to the point of its emancipation, i.e. complete absorption in the Brahman. Thus, in a passage of poetic beauty, unsurpassed perhaps in the literature of the world, the Brihadāranyaka Up. (IV. 3-4)4 tells us of the fortunes of the soul and incidentally develops the doctrine of the transmigration of souls. and in close connection with it, the ethical doctrine of Karman (action) which, with the infallibility of a law of nature, must produce its consequences (its reactions on the ethical plane must be equal and opposite?) and regulate the new birth, which thus depends on a man's own deeds and makes man truly "an architect of his own fate." This is the germ of the Buddhist doctrine which, while denying the existence of soul altogether, allows Karman to continue after death and determine the next birth. The Chhāndogug Up, gives us the most detailed account of this theory of transmigration. The forest-ascetic, equipped with knowledge and faith. enters after death the devayana (the path of the gods) which leads to absorption in (i.e. oneness with) Brahman or deliverance. The householder who performs sacrifices and works goes by the pitriusing (the path of the Fathers) to the moon, where he abides till the consequences of his actions are exhausted, and then returns to earth, where he is first born as a plant and then as a member of one of the "dotia" (or three higher) classes. This is a kind of double retribution, first in the next world (which is traceable to a survival of the old Vedic belief about future life), and then by transmigration in this. The wicked are born again as outcastes, does, or swine. The Brihaderawaka (VI. 2, 15-16) gives a similar account.

RELIGION AND PHILOSOPHY

The Kaushitaki Up. (I. 2-3) gives a somewhat different itinerary, according to which, after death all go first to the moon. From here, some go by the path of the Fathers to Brahmen, while others return to various forms of earthly existence from man to worm. The earliest form of this theory is found in the Satapaths Brhamesa which speaks of repeated births and deaths in the next world, both for the man who has correct knowledge and performs a certain sacrifice, resulting in his attaining immortality, and for the ignorant defaulter, who ultimately becomes the prey of death. In the Upanishadic version, the rebirth takes place in this world. So it is not necessary to suppose (though it may not be impossible) that the theory was picked up by the Vedic Aryans from the animistic views of the aborigines. Some hymns of RV (X. 16. 3; 58. 1-12) contain hints of animism.

A very sound ethical idea underlies the Upanishadic doctrine of the Atman5 the logical and beautiful conclusion of which must be that it is the Universal Soul which we love in each individual, and that the recognition of this Atman must lead to love for all creatures. But it is the doctrine of Karman that represents the preponderance of the moral element in the Upanishads as compared to the Brahmanas Nevertheless, moral precepts are met with in a few passages only as, e.g, in the famous Taittriya Upanishad (I. 11) inculcating truthfulness, duty, etc., and in the Brihadaranyaka Up. (V. 2) preaching self-restraint, generosity, and compassion. The reason is not far to seek. The highest object-union with Brahman-is attainable only by cognition, by giving up non-knowledge, i.e. all works good and bad Sacrifices and pious works can only lead to newer births, but knowledge alone lifts one above the maze of Samsara to the One and Eternally True. This conception of "knowledge" or "cognition" has evolved out of "the knowledge of some secret doctrine or other sacrificial science" on which insistence is laid in the Brahmanas and Aranyakas. The longing for this true knowledge, leading to the disregard of all pleasures, finds poetical expression in the legend of Nachiketas (ante, p. 475) in one of the most remarkable and beautiful Upanishads, the Kathaka, but in the Maitrāyāṇṇya Up. (I. 2-4), one of the latest, it leads to an utter contempt of the world and that pessimistic trait of thought which recurs so often in the Buddhist as well as later Indian literature. The fact is that although at bottom the old Upanishads are not pessimistic, describing as they do Brahman and Atman as anandamaya ("consisting of joy"), belief in the unreality of the world must ultimately lead to contempt for it.

Thus we find in the Upanishads vigorous and creative philosophical thought clothed in the language of poetry. No wonder they make a powerful appeal to the heart and the head. The thinkers seek earnestly for the truth and so their thoughts become a fervent

expression of the ever unsatisfied human yearning for knowledge. All the philosophical systems and religions of India, heretical or orthodox, have sprung up from the Upanishads. The theological-philosophical systems of Sankara, Rāmānuja and others are founded on the Vedenta-Satura of Bādarāyaṇa which in their turn are reared on the doctrines of the Upanishads. Reference has already been made above (pp. 475 fl) to the profound influence exercised by the Upanishads on human thought outside India.

We may now represent a few fundamental tenets of the Upanishads in the form of propositions6 in the manner of Deussen. (1) The Atman is the knowing subject and as such can never become an object for us and is therefore itself unknowable. It can only be defined negatively. When later Vedanta defined it as being, thought, and bliss (sach-chid-ananda) on the basis of the frequent references to these separate elements scattered in the older Upanishads, it is nothing but a negative characterization, because being is rather a not-being in an empirical sense, thought is the negation of all objective being, and bliss is the negation of all suffering. (2) As the Atman is the metaphysical unity expressing itself in all empirical plurality-a unity found only in our consciousness- it is the sole reality. To know the Atman is, therefore, to know everything. There is really no plurality; there can be no becoming; "change" is a mere name. (3) The pantheism of the Upanishads is but a compromise between the two opposite points of view-the metaphysical one which does not recognize any reality outside of the Atman, i.e. consciousness, and the empirical one according to which a manifold universe exists external to us. The Atman being the Universe, it remains the sole reality although the universe is real. But what distinguishes Upanishadic pantheism from that of Europe is the subtle distinction made by the Upanishads when they state that the universe is in God, but never that the universe is God. God (or Atman) is transcendent as well as immanent. (4) Thus when it is stated that the universe is the Atman, the identity remains very obscure. This obscurity was sought to be removed by borrowing the well-known empirical category of causality and representing that the Atman is the chronologically antecedent cause and the universe is its effect, its creation.

2. THE SOTRAS

Side by side with the high philosophy of the Upanishads, laying stress on knowledge and meditation as the means to emancipation, we find a continuance of the old sacrificial rituals of the Brahmanas throughout the period under review. The Srauta- and Grihya-Sitras (ante, p. 478) are our chief sources of information regarding the ritualistic religion of the age, and some important features of the rituals described in them are noted below.

RELIGION AND PHILOSOPHY

As a rule, the Srauta sacrifices required the use of three fires. The number of priests was sixteen or seventeen, not counting the actual performers of minor ritual acts such as the slaying of the animal victims and other menial functions in a fairly complicated ritual. Prayers to more than one god-nay, a very large number of gods-accompanying the ritual acts, were another characteristic-Sometimes, as in the Apri litanies, the order of the deities invoked was the same whatever the families that addressed them. Among the sacrifices, some are the norm (prakritis) which others (the pikritis) follow as a model. For example, the new and full moon sacrifices serve as the norm for a sacrifice of the Ishti type and for the animal sacrifice in its form as offering to Agni and Soma. The latter becomes the norm for other and more elaborate animal sacri-Agnishtoma is the prakriti or norm of the Soma sacrifice in all its variations including the Dvādaśāha, while the Sattras are based on the latter. Among the details of performances in every sacrifice some are subsidiary (anga) and common to many sacrifices, while others (pradhāna) are special or peculiar to it only. A peculiarity of the Soma sacrifice is the singing of the Samans or melodies based on verses of the Rigueda, each of which could be sung to different melodies When, however, more than one verse is sung to one melody, we have a Stotra usually made up of triplets or Pragathas. The Stomas further are forms or ways of chanting Stotras, of which there are numerous varieties. The Stotra is followed by a Sastra which is a recitation of the Hotri or his assistants. Broadly speaking, there are two types of Srauta sacrifices, the Soma sacrifices characterized by the singing of the Samans, and the Havirvarias marked by the absence of Saman-singers. The animal sacrifice is midway between the two. It does not employ the Sāman-singers and so should be deemed a Haviryajña, but, on the other hand, is a vital part of the Soma sacrifice.

The Grihya or domestic ritual® is so called because it centres round the domestic fire or the fire which is established in the home and is maintained by the householder. It was the duty of the householder and his family, including wife, son, daughter, and pupil, to see that it was kept constantly burning and alive. If it ever went out, it had to be rekindled ceremoniously by friction, or borrowed from the house of a wealthy person or of the performer of many sacrifices. The normal occasions for the establishment (with proper ceremony) of the domestic fire were marriage, the division of property of the family, the samdwartana ("the return of the student after the completion of his period of studentship"), the death of the head of the family (when the eldest son kindled a new fire), and a continuous break of twelve days in the maintenance of the fire. As a rule, the householder himself performed the domestic sacrifices, the wife being allowed to act for him, if necessary, at the morning

and evening libations and at the evening Bali. The employment of a Brahman is optional, though he must be requisitioned at the Sulagava (spit-ox) and Dhanvantari sacrifices. When the householder did not call in the Brahman, a straw puppet or a sunshade and garment were placed on the vacant seat in the south which would have been occupied by the Brahman if he were employed. The marriage formulas were muttered by the bridegroom himself if he were a Brāhmana, otherwise by the Brāhmanas on his behalf. In the offerings to the gods the position of the sacrificer's sacred thread was over the left shoulder and under the right arm-pit, but exactly the reverse in the offerings to the Pitris. The domestic offerings receive the name "pāka" in distinction from the Srauta. Pāka means "cooked food," or as an adjective, "simple," Whatever the original sense (and neither is unsuitable), the term is comprehensive enough to include offerings of milk, curds, melted butter, rice, barley, sesame, barely-gruel, porridge, and even the flesh of animals, though these were offered on very rare and special occasions. Varieties of butter (butter at various degrees of temperature) are used, the butter-offering being of a simple type. The fore-offerings and afterofferings, the kindling-verses or instruction-formulae (nigadas) and the invocation of the Ida which are well-known features of the Srauta offerings are conspicuous by their absence in the Pāka ("simple" or "baked") offerings. The few occasions for an animal sacrifice are marriage, offerings to the manes and the guest-reception. The only special animal sacrifice is the Sulagava (spit-ox), which inclines more to the Srauta type.

It is necessary to make a few general observations on certain important aspects of the Vedic sacrifice and the element of magic in the ritual. It is impossible to accept the view that all worship of the gods is to be traced to the cult of the dead, being but an imitation of the mode of providing for the dead. The human worshipper, realizing his weakness and utter helplessness, leans, as it were, for support on the all-powerful gods-a support which he seeks to canvass by the offering of gifts. This is the essential nature of the Vedic sacrifice. This divine help and the power of magic were both invoked through the sacrifice, in the inevitable struggle with the forces of evil or the demons. Magic and religion are never confused in the Vedic religion. The fear of the living for the dead plays an important part in the cult of the dead, but it must be remembered that there is no direct fear of the spirit of the dead, to whom no hostile nature is attributed. It is rather the fear of death-the fear of the great change-that has affected them. This explains why the whole cult of the dead in Vedic ritual is marked by love and deep regard for the dead ancestors, and why providing nourishment for them is a matter that claims the respectful attention of the living all his life.

RELIGION AND PHILOSOPHY

Keith thinks that "in the Rigueda and in the later period alike, the cult of the gods is marked by the absence of any temple or house of the god, even of the simplest kind."7 This view may, however, be justly questioned. If by "temple" we understand "a sacred place set apart for purposes of worship and devotion to a deity." then the aanuagara (Gobhila Grihya-sūtra, I. 4. 5) or firetemple, inside or outside which balt oblations could be offered, is such a temple. A god's house is mentioned in the Grihya-sūtras along with a forest as the place where a student observing the Mahanamnivrata is to fast. When a Snataka is advised to go round "god's houses" (keeping his right side to them), if they are met with on the way, temples seem to be meant. The truth is that though temples probably existed, they played no important part in the ritual of the sacrifice, the essence of which lav in an invocation of the god to come to the place of the sacrifice and to partake of the food and drink there kept ready for him.

If the hymns of praise, the music, and the dance in the ritual can be understood as fitting reception for the god invited, other features such as chariot-racing, dicing, archery, ribaldry, mimic fights, etc., can be explained better as examples of the employment of sympathetic magic than as part of the entertainment provided for the gods. Such magic elements abound in the Vedic sacrifice.

Offerings are made in the hope of favours expected from the deity. The god accepts the offerings and becomes strengthened. and the prosperity of the sacrificer is in proportion to the prospering of the god. This theory of the sacrifice results in an exchange of gifts, but the initiative in this exchange generally comes from the worshipper rather than from the god. That is to say, there are only a few thank-offerings (comparatively speaking) in the ritual of this age or the earlier ones. The Aśvalāyana Grihya-sūtra, (IV. 1. 1 ff.) prescribes the offering of a Soma or animal sacrifice, when a person, who has established the three sacred fires, falls ill and then leaves his residence and goes out of the village to bring pressure on the three fires; he naturally takes these fires with himself and they cure their worshipper, being eager themselves to go back to the village. The view of Keiths that vows of the kind, "Do this and I will offer to thee," are not common in the Vedic religion is not quite correct, and is probably based on the absence of explicit statements. But the offering of first-fruits, the sacrifice offered on the birth of a son or on the acquisition of a thousand cattle, and the feast to the dead at the marriage ceremony should perhaps be accounted as thank-offerings. The subtle distinction that the keeping of a promise (to offer a sacrifice), explicit or implicit, is not a thankoffering is not legitimate in Vedic religion.

Gradually, however, the belief in the magic power of the sacrifice grows to such an extent as to overshadow and ultimately

eclipse the belief in the efficacy of the good-will of a deity. In the organization and elaboration of sacrificial ritual, during this and the Brāhmana age, a particular mental outlook is noticeable, which construes the sacrifice as a potent weapon of magic.

The magic power of the sacrifice could be employed to wash away sin. To take but one example out of many, the Kätyäunds Srauta-sūtra (XIX. 5. 13) tells us that in the Sautrāmani offering, a vessel containing a special preparation is made to drift away on water with the sins of the performers. The sin is treated like a disease, and the concept of this sin or evil is comprehensive enough to include errors in the sacrifice, un-common occurrences in the home or outside, and all unaccountable phenomena of Nature. The Prēyaśchitta (or expiation) offerings, overlaid with magic practices of a simple kind, and culminating in gifts to the priests, occupy a very large space in the Sūtras, both Srauta and Grihya.

The purifying power of a public confession and the usefulness of a warning to others of the identity of the sinner may be elements of belief in some strange and peculiar practices connected with the removal of sin, such as the proclamation by the husband of his in against his wife, while begging for alms clothed in an ass's skin (see ante, p. 495). The murderer drunks out of the skull of the murdered man, puts on the skin of a dog or an ass, and lives on alms, confessing his guilt before all. These practices are mentioned in the Dharma-sütras of Apastamba, Gautama, and Baudhävana, as also in the Pāraskara Gribus-sūtra.

We need not discuss here at length the problem of the original theory of the sacrifice-whether the magic art of perpetuating the life of the herds and of vegetation, and even of man, was the essence of the sacrifice, and whether the gift-theory was original or secondary. We may only note that when the Kauśika-sūtra (XIII. 1-6) prescribes a magic rite in which portions of the bodies of some animals and human beings, such as a lion, a tiger, a Kshatriva and a Brahmachārin, are to be eaten to acquire certain qualities, not totemism but the conception of sacramental communion is hinted at. Similarly the idea of a common meal as a means of producing harmony is clearly seen in the same Sūtra (XIII. 6). The rule in the Grihya-sūtras that nothing is to be eaten without making an offering of a portion of it, is but an illustration of the conception of communion. When the newly-married couple share food together from an offering made by the husband, we see an instance of the belief in the community produced by the sacrifice. But the theory that the sacrifice is a communion of men, both among themselves and with the god, whether through the direct rite of eating with him or as a sacrament through eating a victim which has become impregnated in some measure with the deity, is not enunciated in the formulae of the ritual.

RELIGION AND PHILOSOPHY

The important rôle played by the fire in a sacrifice is too obvious to be emphasized. The fire is the intermediary who conveys the sacrifice to the gods and at the same time an effective means of chasing away evil spirits. The all-important position of the fire in the domestic ritual is evidenced by the fact that the fire is a witness to, and sanctifier of, every domestic sacrament or rite, and receives an oblation or prayer at every important stage of the ritual. The cathartic function of the fire is to be seen in the burning of the grass covering the altar at the end of the offering, lest, imbued with a superhuman character, it should harm anyone by contact. The omentum is burnt before being offered to other deities, evidently with a view to purifying it and imparting to it an agreeable savour.

The fire-offering, however, was not the only type of offering. Food for the dead was placed in pits according to an ancient and universal custom. Gifts to water-detites were naturally thrown into the waters and the offerings to Rudra and other demoniac figures may be deposited in anthills or hung on trees or merely thrown in the air.

A comparison of the Srauta ritual with its three fires with the Grihva ritual with its one fire suggests some interesting hypotheses regarding the origin of this triad of fires. Certain ceremonies are common to both the cults, such as the morning and evening Agnihotra and the new and full moon sacrifices, the difference being one of elaboration only. Certain cereal and animal offerings are also common to both the cults. Every householder had to keep one fire in the house to carry on (mostly by himself) the domestic cult. The kings, the nobles, and the rich people who could afford it, maintained the three fires, employing a number of priests for the performance of the Srauta cult. The family rites as such must be performed only in the domestic fire, while the Soma sacrifice cannot be performed without the triad of fires. The name Garhapatya ("of the householder") of one of the three Srauta fires suggests that the latter three have developed out of the one domestic fire, because like the domestic fire the Garhapatva alone was continually kept. the other two -the Ahavaniva and Dakshina-being derived from it when necessary. A man going on a journey takes formal leave of the Garhapatya first, which is another point of contact with the ceremonial of the domestic fire. The Ahavaniya is the fire for the actual offering and the Garhapatya for cooking the food to be offered to the gods; the Dakshinagni, by its place in the south, was, in the beginning, probably intended to drive away the evil spirits, and later, to receive the offerings intended for such spirits and for the fathers.

As a rule the sacrifice is for an individual, the Yajamāna ("sacrificer"), who provided the "sinews" of the sacrifice and the gifts for the priests. There is only one exception to this rule, namely the Sattras or "sacrificial sessions," lasting for a year or longer, where

the entire host of officiating priests are themselves the sacrificers, it being taken for granted that all are Brahmanas. The merit of the offering in these Sattras belongs to all the sacrificers, while any error or evil done belongs to the perpetrator only.

As Agni is the Purchita as well as Hotri priest in the Rigueda. the Hotri was the most important priest in those days. Later on, with the elaboration of the ritual, the Purchita, who was the superintendent or overseer of the sacrifice, became a different priest from the Hotri and called the Brahman, to whom the duty of superintending the whole sacrifice was naturally assigned. In the Srautasūtras of Śānkhāyana, Āśvalāyana, and Kātyāyana, the list of priests is as follows: the Hotri, Potri, Neshtri, Agnidh, the Adhvaryu, the Brahman and the Upavaktri (who appears in place of the Prasastri in the otherwise identical list in the Riggeda) and the Achchhavaka (who is later admitted to a share in the Soma). Another passage of the Katyayana Śrauta-sūtra (IX. 8. 8 ff.) gives another list in connection with the morning pressing of the Soma: the Hotri, two Adhvaryus, two Praśastris, Brahman, Potri, Neshtri, and Agnidhra. The second Adhvarvu becomes the Prati prasthätri and the second Praśastri becomes the Achchhavaka later. The Hotri originally combined the two functions-the performance of the offering and the recitation of the accompanying mantra-but the functions were later separated. In the ritual text-books of our age, two kinds of offerings are to be distinguished-the yajatayah in which there is one reciter and performer, i.e. the Adhvaryu, so called because his manual duties are the more important, and the juhotayah in which there is the Hotri to recite and the Adhvarvu to perform the manual acts. The Hotri recites a variety of verses but, in a large number of offerings, only two types of verses, the Puronuvākvā which invites the god to be present at the offering intended for him, and the Yājyā which is recited just when the Adhvaryu is about to throw the offering into the fire. He also recites the Nivids, which are inserted in the hymns and are invitations to the god, with a bare enumeration of his titles, to come and intoxicate himself with the Soma. Although, in their present form, the Nivids are later than the Rigveds, they are, in essence, the oldest form of the invitation to the gods, from the point of view of the evolution of the liturgical employment of rubrics in the ritual. The Adhvaryu is in charge of the practical performance of the various manual acts of the ritual and has to mutter a certain number of formulas, normally in prose. to the accompaniment of the performance. He was assisted by the Agnidh, whose main duties were concerned with the kindling of the fire. The Hotri, the Adhvaryu with his assistant, the Agnidh, and the Brahman, the general overseer, sufficed for the minor sacrifices and the new and full moon offerings. For the animal sacrifice, the

RELIGION AND PHILOSOPHY

Hotri required an assistant named variously Upavaktri or Prašāstri or Maitravaruna, and for the Soma sacrifice, the services of the Potri and the Neshtri were requisitioned. The Brahmanachchhamsin, in the ritual of our period, is but a Hotraka or an assistant of the Hotri. The position of the Brahman enumerated in the list given above becomes all-important in this age. He recites practically nothing. He takes his seat by the chief fire-altar and is engaged in general supervision He makes good every flaw in the sacrifice by his silent meditation. The Udgatri, Prastotri and the Pratihartri were Saman-singers, whose chants fall into two classes. One is composed of those addressed to Soma Pavamana and based on verses mainly drawn from the ninth Mandala of the Rigueda. The other class consists of chants addressed to the ordinary gods to whom libations are offered at the three pressings of the Soma. The chant based on certain Rik-verses is followed up immediately by the Hotri's recitation of those very Rik-verses. This correspondence or parallelism is insisted upon in the ritual. For the Soma sacrifice, as many as sixteen priests are prescribed, the Kaushitakins even prescribing a seventeenth.

In the ritual of this age, the choosing of the priests (rituigarava) has become a well-developed formal ceremony. The sacrificer and the invitees both satisfy themselves as to the worthiness and qualifications of the other party, before extending and accepting the invitation. An interesting feature of the formal questions and answers used in the ceremony is the care taken by the priests to see that they are not invited because other priests who had been employed had struck work for some reason, leaving the sacrifice unfinished. The sacrificer has to be a member of one of the three higher castes. His duties in this age are very light. He repeats certain formulae, throws the offerings into the fire, and observes certain restrictions along with his wife. Above all it is he who pays the Dakshipā (fee), appropriate to each searifice-

We may now briefly refer to the relation of magic to this ritualistic religion. Magic is not earlier than religion, though they are inextricably blended in India. As has been noted already (ante, Ch. XXII, p. 442) the Atharvaveda is the first book that makes use of magic mixed up with theosophy, though it is priestly and not purely popular maric. In the Brāhmanas maric practically pervades the whole ritual. The transition is best exemplified in the changed conception of the sacrifice, which was originally an appeal or prayers to the gods, but became the supreme power in the universe controlling even the gods and granting all wishes. The potencies to be treated by magic are both personal or actually alive, and impersonal, i.e. spirits. The means of magic are the words and figures or representations of things which are used, either as substitutes for, or in addition to the articles connected with, the objects of

magical treatment. Special times, such as evening or night, and places such as grave-yeards or cross-roads are prescribed. The chief source-books for our information regarding magic are the Atharvaveda and the Kausika-sitra belonging to that Veda, the Sāmavidh-na Brāhmava, the Rīgvidhāna, the Parisishas of the Atharvaveda and other minor texts.

The averting of evil influences is accomplished by propitiation. or banishment by any means fair or foul, such as the use of water for washing them off, the use of noise, the holding of a staff, and the gesture of shaking off and transfer of the evil to someone else. The use of amulets is recognized as an excellent means of protection. Mimetic magic, the magic spell, and even the magic sacrifice are all known and prescribed in the Sütra texts. The theory of divination is known, and a variety of means is employed. Omens are drawn from the movements of animals. The interpretation of dreams is also an interesting feature of Vedic magic, and experts in the interpretation of omens are known. The ordeal is nothing more than an application of the theory of divination. Although not many characteristic and essential practices of the later Yoga philosophy are traced in ritual literature, the fivefold divisions of breaths or vital airs is known. Perspiration is induced in the Dīkshā ceremony. as a means of awakening the ecstatic state, but the various sitting postures familiar to the later Yoga are not known

It would appear from the above discussion that religious thought during the period under review does not, on the whole, present a very consistent picture because of the contradictory legacies it was heir to The polytheism of the Samhitäs had narrowed down to Upanishadic monism. At one end was sacrifice and ritual, at the other was the abstruse and profound philosophy of the Upanishads. The conception of rebirth was inextricably mixed up with ideas of a happy heaven and a horrid hell. Spiritual barrenness of the people at large was the natural result. No wonder formulae, observances, and sacraments became the order of the day!

But even though only sacrificial rites and duties are found systematized in the Kalva-sūtras, ethical purity was not nedlected and indeed was regarded as the sine qua non in the path of Karman. Inner ethical virtues such as purity, perseverance, forbearance, and kindness to all were prescribed along with religious rites by the Gautama Dharma-sūtra (VIII. 20-23) for example, and are even ranked higher than mere ritualistic ceremonial. Self-restraint is the mother of all virtues and is to be ceaselessly cultivated in this life, since the present life is but a preparation for the real, happy life after death. Here we find the doctrine "Man is the architect of his own fate," in the truest sense of the phrase. This Karman discipline does not rule out desire as the motive power of

RELIGION AND PHILOSOPHY

action. Only it is focussed on the acquisition of happiness in a future life. Dharma (religious merit), Artha (the acquisition of wealth), and Kāma (the enjoyment of the present life) are the Purusharthas ("human values" or the "aims of man"). Worldly aims and efforts to secure them are not scorned but harnessed to the fulfilment of higher aims in the next life. Dharma bears fruit in a future life and is extra-empirical in its technical aspect, in the sense that it can be ascertained only from a divine or traditional code.

For a general account of the Upanushads, and particularly their chronological classification cf. Ch XXXV.
 The Philosophy of the Upanushads, p. 39.
 Koushitoki Upanushad, IV, and Brahaddramyska Up, II 1
 Ch. Ch. XXIV, pp. 470 ft.

^{5.} Some quotations from the Upanishads on this subject are given in Ch XXIV.

^{5.} Source Quantum Control of the Control of the Control of Control of these rituals, cf. Ch. XXIV, pp. 474 ff 7. RPVU, p. 280, fn. 5.

CHAPTER XXVII

SOCIAL AND ECONOMIC CONDITIONS

I. SOCIAL CONDITIONS

1. Family Life

THE family life was the framework on which society rested, and the Gribya-sutras that deal with the domestic sacrifices and other duties performed by the householders supply valuable information regarding it.

As in the age of the Later Samhitas and Brahmanas, the family was normally a joint one with the most senior married member or householder as the head. But partitions often took place as the rules in the Grihva-sūtras regarding the kindling of the domestic fire show. Among the occasions mentioned there for fresh formal kindling are the division of the inheritance or the death of the head of the family, in which case the eldest son kindled it. Seniority in age constituted an important claim for respect in the family. The directions about the Vaisvadeva-bali-one of the daily domestic sacrifices-that it need not be repeated every time the food was cooked, and that it may be offered from the kitchen of the chief householder or from that of the member whose food was ready first, show that the joint family was big enough to necessitate cooking at different kitchens. The fact that a rite is prescribed for one desirous of a large family shows that the people liked to have many children. Male additions to the family were preferred to female ones. An interesting formality in the family life of these days is the manner in which the father greeted the children in the house after his return from a journey, the mode of greeting being different for male and female children. The high sense of responsibility and duty expected to be shown by the head of the family towards the other members is seen in the Grihya-sütra rule that he was to take his food only after feeding all the children and old persons, as well as any female residing under his protection, and any pregnant lady in the house. The respect and authority that the father commanded is shown by the fact that the Dharma-sutras. describing in detail the acts of courtesy which a son owed to his father, mention that he is allowed to eat the remnants of his father's food. The father on his part is expected to be kind. The heartless conduct of the father in the story of Sunahsepa is condemned in the Sānkhāyana Srauta-sūtra. The spiritual succession from father to son is almost taken for granted by the Upanishads. The gradation of the relations in a family is given, as it were, in the Chhandogus

Upanishad (VII. 15. 2), where father, mother, brother, and sister are mentioned in succession.

2. The Caste-System

The period of the Sūtras witnessed the gradual hardening of the caste-system in general and the deterioration of the position of the Vaisyas and Sūdras in particular. We can trace this process step by step if we follow the evidence of the three broadly distinguishable chronological strata in the Sūtras, namely (1) the Srauta-sūtras with which may be conveniently considered the evidence of the Sūtras of Pāṇini also; (2) the Gṛihya-sūtras; and (3) the Dharmasūtras.

From the evidence of the Sankhavana Srauta-sutra which records that the Vajapeya sacrifice—a sacrifice of which the chariot race forms an integral part—was at one time a sacrifice for a Vaisya as well as a priest or king, it is clear that the position of the Vaisva is deteriorating now and Caste distinctions are hardening. The power of the Brahmanas is growing. They are exempt from taxes and could, on occasions, be kings, but Kshatriyas could hardly become priests. The prestige and influence of the Purohita in the state are considerable. Pănini's division of the Sūdras into niravasita and aniravasita shows that certain degraded Sudras with unclean habits like the Nishādas were forced to reside outside the limits of the village or town. The Sudra was denied the privilege of samnyasa ("renunciation"). The rashtra or nation consisted only of the three higher Castes, the Sūdras being excluded from it Although some Caste-sections were degraded, it is not quite certain if the Mixed Castes had arisen in this period.

The Grihva-sūtras clearly differentiate the status, occupations, obligations, duties, and privileges of the four principal Castes in matters both spiritual and secular. A different age is prescribed for each of the three higher castes for the various sacraments, such as the Chudakarana (the tonsure ceremony of the child) and the Upanayana ("initiation") ceremonies. One is not sure whether these different prescriptions were adjustments necessitated originally by the differences of mental calibre and moral fibre in the various castegroups (for the Upanayana ceremony, for example). Different seasons are also prescribed for the different castes. The differentiation extends even to such minor things as the girdle, the staff, the skin, and the garment to be used by the student, and the Upanayana mantra to be recited by him. The story is the same with regard to most of the sacraments such as the naming of the child, the building of a house, marriage, and even such unessential matters as anule-Pana or salving which is part of the snana ceremony signifying the completion of the period of studentship. Even in the giving

of gifts, the Caste determined the nature of the gift as much as the financial condition of the giver.

The Brahmapas in particular have now become a well-organized priesthood. Among their special duties and privileges are the study and the teaching of the Veda, sacrificing for themselves and others, and the receiving of gifts. The feasting of learned Brahmapas to invoke their blessings is, without exception, laid down as the concluding feature of every sacrament. That this feasting was originally more a disinterested homage to the noble qualities of the spiritually-minded Brahmapas, than a sop to a worldly-minded priesthood, is clear from the rules that the invitee must not be arranged in a bargaining spirit. The general trend of the Grihya-sūtra prescriptions is that if the privileges of a Brahmapa were many, he deserved them, and inspired respect and confidence as much by his high ethical standard as by the responsibilities and duties he owed to the other classes.

The Rajanya or Kshatriya class, among the rest, came closest to the Brähmana class in power and prestige, the two together being as it were the moral and material props of society. It was but natural that the cultural and social status of the Vaisyas should gradually deteriorate, because by virtue of their occupations, namely agriculture, cattle-breeding and commerce, they came into close contact with the Sudras. But the popular notion that the Vaisya class had very little in common with the two higher classes in religious and sacramental matters is erroneous, though it has crystallized in the Bhāgavadgītā verse (IX. 32) which puts women, Vaisyas, and Sūdras in one and the same category of people to whom eligibility to absolution through Bhakti (devotion) is conceded by the Lord. According to the Grihya-sūtras, when the domestic fire is to be kindled for the first time, it may be borrowed from the house of a Vaisva rich in cattle, or from the house of one who performs many sacrifices, be he a Brāhmana, a Kahatriya or a Vaisya,

When we come to the Südras, however, we find that a wide gulf separates them from the three higher classes. The mixture of non-Aryan elements was probably responsible for this, as the word Arya has a racial as well as moral connotation in this period and meant practically "reborn," that is, a member of the three higher castes. The privilege of performing the sanctifying sacraments (excepting that of marriage which took place in his case without the recitation of montrus) is denied to a Südra, and this was at once the cause and effect of his low position. But the Südra was certainly not a pariah. He enjoyed the status of a regular member of the household, and as a servant he was employed in all departments of the household not excluding the kitchen.

If the Upanayana ceremony was neglected for three generations in a family—whether Brahmans, ksnatriya or Vaisya—the members became outcastes whose very signt was inauspicious and who probably lived outside the village or town. But the Vrātyastoma ceremony of expiation and penance could secure for the outcastes readmission into the Aryan fold. Thus the horrors of an age-long and irremediable outcasting were unknown in the days of the Gribus-sūtras.

The Dharma-sutras show that caste distinction has outstrinped its proper limits and has even invaded the field of civil and criminal law (ante, pp. 495 ff.). The legal rate of interest and fines were graded according to the castes and a Sudra received capital punishment for a crime like homicide for which lighter punishments were awarded to members of the higher castes. The contact of the three Arvan castes with the Sudras through intermarriage was bound to lead to the rise of mixed castes, and the difference of occupations must have resulted sooner or later in an increase in the number of such mixed castes. Whether the mixed castes had arisen as early as the period of the later Samhitäs is not certain. The enumeration of different classes or categories of victims in the Purushamedha chapters of the White Yajurveda, for example, may refer to different professions rather than castes. Similarly, for the period of the Srauta-sütras and Pānini, all that can be said is that certain caste-sections were degraded, but for the period of the Grihya- and Dharma-sutras the existence of Mixed Castes cannot be doubted. The anuloma type of marriage, sanctioned by the Sütras, whereby a member of higher caste could take unto himself a wife or wives of the lower castes, in addition to one of his own caste, must necessarily lead to new caste-divisions, although in the beginning, for some time, the rule that the progeny of such anuloma unions belonged to the varna or caste of the father arrested such a tendency. The Dharma-sutras give the names of the mixed castes that arose not only as a result of the permitted anuloma marriages, but also as a result of the prohibited pratiloma marriages (where the husband's caste was lower than that of the wife) which apparently took place not rarely The Vasishtha Dharma-sūtra (XVIII. 1). for example, tells us that the offspring of a Sudra male and a Brahmana female becomes a Chândâla who was to be treated as an outcaste. The sacramental direction of the Grihya-sūtras raise an interesting problem in this connection by mentioning rarely, if ever, the mixed castes. The rules seem to be framed only for the Brāhmana, the Kshatriya, and the Vaisya. One can understand that the progeny of pratitoma marriages should be excluded from the sacraments, but if anuloma progeny was also excluded, then a very large number of people would be denied the spiritual benefit of the sacraments. Apparently the Apastamba Grihya-sūtra is of this

view when it omits all reference to the rathaldra (the offspring of an anuloma marriage)in its Upanayana rules. The Baudhäyana Grihya-sütra, which includes the rathaldra in the initiation rules, seems to reflect the earlier view. The following stages may, therefore, be distinguished in the treatment of the mixed castes in the Sütra period from the sacramental point of view. In the earliest, perhaps the progeny of anuloma marriages was absorbed in the father's vara and thus became eligible for the sacraments as a Brähmana, Kshatriya, or Vaisya. The next stage was probably reached when some important intermediate castes, like that of the rathaldra, received a separate treatment in the sacramental rules. The third stage is reflected in the exclusion of the rathaldra and other mixed castes from the sacraments.

It has to be recognized, however, that the caste-system even in this period had not become as wooden and exclusive as it is now. Inter-dining and inter-marriage (in the anuloma form) were not prohibited, though it is difficult to decide whether and how far change of caste was permissible. Even outcastes who had performed the prescribed penances could be readmitted to the Aryan fold. Nor were the castes so strictly separated or ramified into so many caste-divisions as obtain today. We see in the Dharma-sūtras the beginning of the formal theory of defilement resulting in the taboo of all contact on the part of a pure man of the upper castes with an impure man, namely, a member of the lowest caste For example. we see in the Dharma-sūtras of Vasishtha, Gautama, and Apastamba the idea of impurity communicated by the touch or contact of inferior castes, which is reflected in the purification rendered necessary in the case of contact with a Sudra and implied in the prohibition of eating in company with men of lower castes.

3. Marriage and the Position of Women

As already mentioned above, the analoma system of marriage (i.e. between a male of a higher and a female of a lower caste) prevailed in this period. The low status of the Sūdra wife is reflected in the directions given in the Srauta-sitras that a sacrificer is allowed to cohabit with a savarqā wife (of the same caste as his own) but not with the Sūdra one The rules of Pāṇini regarding Abhi-vādana (salutation as a mark of respect to elderly persons in the house) show that the presence of wives of the lower castes (especially the Sūdra one) in a family and the consequent inevitable association of the higher caste ladies with them in the house has brought down the general level of womanly culture and led to a deterioration in their social status.

Among the Grihya-sūtras, only the Asvalāyana Grihya-sūtra, and most of the Dharma-sūtras, mention eight forms of marriage. Of these, two call for an explanation, viz., the paidācha, in which

a girl is carried off while her relatives are eleeping or are indifferent, and the rēkshasa in which the girl is abducted after a fight with her relatives. Probably the names of these marriage forms are derived from the names of the tribes among whom those peculiar marriage customs prevaled. That such immoral practices should be dignified as "forms" of marriage may be due to the desire not to deny some kind of a social status to the unfortunate girl-victim and her progeny, once the regrettable occurrence had taken place and was beyond recall. The Crihya-sūtras give detailed rules regarding the proper seasons for marriage, the qualifications of the bride and the bridegroom, and the various stages of the marriage eremony. The bride should not be a sapiyda relation of the bridegroom's mother nor belong to the same gotra as his own. The bridegroom should be a young man with intelligence, character and good health, and should, above all, come from a good family.

The various stages of the marriage ceremony are as follows: (1) the wooers formally go to the girl's house; (2) when the bride's father has given his formal consent, the bridegroom performs a sacrifice; (3) early in the morning of the first day of the marriage celebrations the bride is bathed; (4) a sacrifice is offered then by the high priest of the bride's family and a dance of four or eight women (not widows) takes place as part of the Indrana karman; (5) the bridegroom then goes to the girl's house and makes the gift of a garment, unguent, and mirror to the bride who has been bathed as mentioned already; (6) the Kanyā-pradāna or the formal giving away of the bride now takes place, followed (7) by the Pani-grahana, the clasping of the bride's right hand by the bridegroom with his own right hand; (8) the treading on stone; (9) the leading of the bride round the fire by the bridegroom; (10) the sacrifice of fried grains; and, the most important ceremony of all, (11) the saptapadi (the couple walking seven steps together as symbolic of their lifelong concord) follow in due order Finally the bride is taken in all ceremony to her new house. It must be taken for granted that the offering of oblations to the fire and the feasting of Brahmanas take place at every important stage in this as in other ceremonies.

As regards the age of the bride, the prescriptions of the Grihyasitras differ. The older texts which describe the consummation of marriage as the Chaturthi-karman, or the ceremony of the fourth (night immediately after the marriage), evidently imply that the bride is of mature age. The more modern Grihyas-sitras and the Dharma-sitras, however, lay down the rule that the bride should be nagnikë (lit., naked), i.e. one who has not yet had her monthly period or one whose breasts are not yet developed Evidently the only reasonable explanation of the incongruity is that the earlier practice is reflected in the older texts.

The prevalence of polygamy is implied in the anuloma system

of marriage. The elements of bride-price (fulka) are discernible in the Asura form of marriage, where the father of the bride is gladdened with money, and there are hints of a dowry in the Brāhma and Daiva forms of marriage where the father gives away the daughter after decking her with ornaments.

The prayers and rites of the ceremony clearly indicate that matrimony was a holy bond, and not a contract, and that progeny (especially male progeny) was the goal of marriage. As in the preceding age, the birth of a daughter was not welcome, and this fact in a way reflects the comparatively inferior position of women in society. All the sacraments, except that of marriage, are performed in the case of women without the recitation of Vedic mantras, and the Upanayana is not performed for them.

The woman, however, held an honoured position in the household. That a life of merriment, song, and dance was not denied to her is seen from certain sacraments in which women are asked to dance and sing. The presence of women who are not widows as particularly desired in marriage and other sacraments. The Gobhila Grihya-sütra allows the option that the wife may offer the morning and evening oblations in place of the husband, because "the wife is as it were the house." That there were wives who desired to keep their husbands under control is clear from a rite prescribed for the purpose.

Since the Dharma-sūtras treat of the widow's right in the property of her husband, the possibility of the general prevalence of satī is ruled out. The Vasishha Dharma-sūtra speaks of the marriage of widowe under certain circumstances, and the son of a remarried woman is one of the twelve sons enumerated in the Dharma-sūtras. So the remarriage of widows was not as strictly prohibited as it appears to have been in later days. In the marriage rules of the Dharma-sūtras local customs were recognized. The Baudhāyana Dharma-sūtras local customs were recognized by the Dharma-sūtras uncle is a southern custom. The custom of niyoga (levirate) or appointment of widows is recognized by the Dharma-sūtras which give detailed rules laying down the circumstances under which it is permissible Some of the later Dharma-sūtras, however, condemn it.

On the whole the Dharma-sutras take a more lenient attitude towards women than the Smritis of a later age or the customs and practices of the present day. Baudhāyana (II. 2. 4. 6.) quotes the injunction, which also occurs in the Manu-smriti (IX. 81), that "a barren wife should be abandoned in the tenth year, one who bears daughters (only) in the twelfth, one whose children (all) die in the fifteenth, but she who is quarrelsome without delay." But Apastamba (II. 5. 11. 12-14) forbids the husband to take a second wife unless the first wife has no male child or neglected her religious

duties. According to Vasishtha (XXVIII. 2-3) a wife shall not be abandoned "even though she be quarrelsome or tainted by sin, or have left the house, or have suffered criminal force, or have fallen into the hands of thieves." Even a wife, who has committed adultery, becomes pure and is taken back by her husband after she has done proper penances (Vas. Dh. S. XXI. 8-10). As noted above (Ch. XXV, p. 495), Apastamba (I. 10. 28. 19) imposes severe penalties on a husband "who unjustly forsakes his wife." On the other hand "a wife who forsakes her husband has only to perform a penance" (Ap. Dh. S. I. 10. 28. 20). This is a singular instance where the law or custom accords more favourable treatment to the wife than to the husband. Again, "a father who has committed a crime causing loss of caste must be cast off, but a mother does not become an outcast for her son." Similarly, the male offspring of outcasts are (also) outcasts, but not the females, who may be married, even without a dowry, by a twice-born (Vas. Dh. S. XIII. 47. 51-53). It is interesting to note that according to Baudhavana (IV. 1. 15-16) "if a damsel has been abducted by force and has not been wedded with sacred texts, she is to be treated like a maiden and may be lawfully married to another man." Lastly, there is a general agreement among the Dharma-sutras that a grown-up maiden, if not given in marriage in proper time by her father, may choose her own husband after waiting for three years (or months). At the same time the general principle is already enumerated in the later texts that "the males are the masters of women." "Their father protects them in childhood, their husbands protect them in youth, and their sons protect them in age; a woman is never fit for independence" (Vas. Dh. S. V. 1-2. Bau. Dh. S. II. 2.3.44-45).

4 Education

The Upanishads are a living testimony to the high intellectual attainments of the age. The stories of Svetaketu Aruneya and Satvakāma Jābāla in the Chhāndogya Upanishad and the wellknown passage in the Taittiriya Upanishad (I. 11) containing instruction (anusisana) given to the student at the end of his studies show that the educational system maintained the high standard and lofty ideals of the preceding age (ante, p. 474). Some special features of the educational system are prominently brought out in the Upanishads. We find, for instance, that the highest position in society is willingly yielded to the intellectual aristocracy. Kshatriva kings like Janaka were famous for their learning, and respect was paid to them by all including the Brahmanas. There are many instances on record where even the Brahmanas learned the sacred knowledge, particularly philosophy, from the Kshatriyas. The story of Aruni, in the Brihadaranyaka Upanishad, shows that even old men became pupils. But the most pleasing feature is the frequent

reference to women teachers, many of whom possessed the highest spiritual knowledge. The famous dialogues between Yājñavalkya and his wife Maitreyi (Byih. IV. 5) and Gārgī Vāchaknavi (Byih. III. 6. 8) show the height of intellectual and spiritual attainments to which a woman could rise. The stories of these noble and gifted ladies stand in and contrast to the later age when even the study of Vedic literature was forbidden to women under the most severe penalty.

The Upanishads contain several lists of subjects of study, and these give us a good idea of the wide range of knowledge in those days. One such list1 mentions not only Veda, Itihasa, Purana, and spiritual knowledge (Brahma-viduā), but also grammar, mathematics (Rāśi), chronology (Nidhi), dialectics (Vākovākua), ethics (Ekauana), astronomy, military science, science of snakes, and knowledge of portents (Daiva). There are a few more branches of knowledge mentioned in this list whose exact scope or nature cannot be defined, such as Pitrua (science relating to the manes), Deva-vidya (etymological interpretation of divine names or knowledge of gods). Bhūta-viduā (demonology or science of elements), and Devajanavidyā (dancing and music or mythology). It is extremely unfortunate that we have no texts preserved regarding many of these subjects. But the list shows how a very comprehensive view of education was developed at the close of the Vedic Age. It also demonstrates that the six subjects comprised in the Vedangas, to which a detailed reference has been made above (Ch XXIV, p 477), formed only a small portion of the curriculum of study, and not the whole of it, as is popularly believed.

The Sütras give us a detailed account of student-life, which commenced with the upanayana (initiation) This ceremony, the essential features of which have been described above (Ch. XXIII p. 459), in all probability originally signified the formal reception of an adult youth as a regular member of the (Aryan) tribe, a custom that prevailed among all primitive people. But, as described in the Grihya-sūtras, it is dominated by priestly interest, and this is not unnatural, as in this age, education was entirely under the control of the priestly class, and upanayana meant also the formal initiation into an educational career of boys of the three higher castes, at the ages respectively of eight, eleven, and twelve. The youth to be initiated wears a new upper garment or skin (which is to be that of a deer, goat or cow, according to his caste), a lower garment of a suitable colour, a staff of the prescribed length, and a threefold twisted girdle. According to some Grihya-sūtras he wears a sacrificial cord also. This equipment constitutes the educational uniform, as it were, of the youth.

Moral training formed the very pivot and the backbone of the educational system, and development of character was the one ideal

that dominated it. The numerous vows and observances obligatory on the pupil (Brahmachārin) after the upanayana, which was a kind of initiation by the Guru (teacher) into a new spiritual life, entailed on him the most rigorous discipline for a prescribed period, during which he was to live religiously as a student in the house of his teacher. His daily routine is begging alms, collecting fuel, looking after the sacrificial fires, tending the house (of the teacher). learning, and practising austerities. The maintenance of chastity was obligatory on the Brahmacharin. Thus the ancient universities were residential, and a more perfect tutorial system was followed than is possible in any modern university, the pupil being under the observation of the Guru all the twenty-four hours. The daily begging of alms, on which the student lived, was for the inculcation of "plain living and high thinking," and had probably little or nothing to do with the financial status of the pupil or of the teacher with whom he resided. Attention may be drawn in this connection to some interesting practical and thoroughly human aspects of the educational system of this age as reflected in the Taittiriya Upanishad (I. 11.) After the admonition "let the acharya, the parents, etc., be your gods" comes the frank admission that the preceptors, as human beings, may have their weaknesses, but it is not these but their good points that have to be copied by the pupils. A very practical streak is revealed in the advice to the pupil to continue the family-line by marrying and begetting children, to attend to kuśala or well-being (in a wordly sense), to make gifts and practise charity. for fear (bhaya) of public opinion or out of shame (hriya), if not out of the generosity of the heart.

The intellectual side of education was developed through the numerous subjects of study referred to above Naturally more particulars are given of the study of the Vedic literature It centred round the preservation by means of recitation, of the Veda of the particular Sakha to which the pupil and the teacher belonged, or of as many Vedas as could be mastered by the student. Memory was a specially valued faculty and was most assiduously cultivated. The period of studentship is normally fixed at twelve years or until the pupil has mastered the Veda, though it may extend to much longer periods such as twenty-four or twenty-eight years, nay even for life in exceptional cases. The extent of the daily lesson is described, among others, in the Grihya-sūtras of the Rigveda The pupil is to recite either the hymns belonging to each Rishi or each Anuvāka of the short hymns (Kshudra-Sūktas) or an Anuvāka or one verse in the beginning of each hymn. This option was a very useful and practical concession which enabled students, who did not aspire to become Vedic scholars, and (probably and chiefly) students of the Kshatriva and Vaisya castes, to fulfil nominally their duty of learning the Veda. The Grihya-sūtras proceed on the as-

sumption that all the three higher castes are to go through a period of studentship, but more often than not, the Kshatriya studied the art of war and the elementary knowledge of administrative functions. There are, however, traditions regarding the Kshatriyas studying philosophy and having taken a prominent part in the evolution of the doctrine of Brahman. As for the Vaisyas it is unlikely that they were engaged in the intellectual life of the day, and at least in their case, thus very practical device of a nominal fulfillment of the duty of Vedic study was very useful. A student who knew the first and last hymns of a Rishi or of an Anuväka was, by a sort of fiction, considered to have known the whole portion belonging to the Rishi or the whole Anuväka.

The rite prescribed for victory in debates shows that literary debates were very common and were held in special assembly-halls which used to be crowded.

The Vedic term commenced with the upäkarman (inauguration) ceremony which was performed some time during the bright fortnight of the month of Sravana (July-August) when the herbs appear. or during the rainy season. The Vedic study then went on for four months and a half or five months and a half or six months, at the end of which came the utsarga (discharge) ceremony which formally closed the first term in the month of Pausha or Mägha. After this there is a break of study for five or six months (this appears to be the long vacation of the ancient University), or according to the Dharma-sūtras, the Vedas may be studied during the bright fortnight and the Vedangas during the dark one. This almost year-long recitation was subject to numerous interruptions (anadhyāyas) or "no-lesson" intervals, the special occasions for which were births and deaths, portents, miracles, lightning, thunder, rains or eclipses, and the normal occasions for which were the 14th and 15th days of the two fortnights, the last days of the seasons, etc. The large number of these interruptions is not surprising, as the ancients held that it was better that there was no recitation at all. rather than that a slight error should creep into it, get repeated in the transmission by word of mouth, and later become an integral part of the Veda itself. The preservation of the Vedic literature by a meticulously correct and scientific method of recitation, down to the minutest part of it, viz., the syllable, was their chief concern, because in the beginning, Vedic texts were not available in a written form and even later were not usually reduced to writing. Impure places were to be avoided for the recitation. Personal purity and good health were also essential conditions for study. After the completion of the whole course came the ceremony of samdvartana after which the student, now called a snataka (i.e. one who has taken a ceremonial bath marking the termination of his studentship), can

either enter upon the married state and found a household or (in exceptional cases) remain celibate, his principal duty being now the management and support of his family from which he was so long absent.

The samkuctana, however, does not spell the end either of vedic study or of moral training. The snätaka can carry on both either in the rôle of a teacher or student. The svädhydya or daily recitation of Vedic texts is part of the fivefold daily routine, consisting of the performance of the five mahāyajnīas (Great Sacrifices), of the married snätaka in the capacity of a householder, and comprises portions not only of the Sanhhtās, Brāhmanas, and Kalpasitras, but also of the Gāthās, Nārāšamās, Itthāsas, and Purāṇas-In the Dharma-sūtras of Vasishtha and Apastamba there is an inhibition against learning a language spoken by barbarians, and the study of śabda-śastra (philology) is condemned in the Vasishtha Dharma-sūtra (X 20).

The teacher is the central figure, the very pivot of the educational system with which the State had very little to do. He introduces (upa-nī) the boy to studentship, and is in sole charge of his moral, mental, and physical upbringing. The teacher, who was a snātaka, provided in his own house for the boarding and lodging of a certain number of pupils, and received from them, in return, daily service during the period of studentship and, at the end of it. gifts voluntarily given by the pupils. Though, thus in a measure, the teacher was compensated for his labours, the relationship between the teacher and pupil was in no sense mercenary, but sacred and almost spiritual. Very often the father himself was the teacher, and the student received education at home. The teacher was the friend, philosopher, and guide to the pupil. The initiation of the boy into studentship by the teacher marked, as it were, his second birth (in a spiritual sense), whence the term dvija ("twiceborn") was applied to the three higher castes, who only had the privilege of upanayana. The pupil was to show the very greatest respect to the teacher. It was not, however, merely a one-sided discipline. The teacher also observed certain vows and rules while he taught.

That physical training was an integral part of the educational scheme is clear from the unmistakable trend of the numerous prayers for the grant of vigour and strength that form part of the upanayana ceremonial. The begging of alms, morning and evening, the gathering of fuel-sticks, and the manual labour involved in the worship and tending of the fire made for sufficient hard work or exercise for the student. The recitation of the vedic texts was a stremuous vocal exercise. But the prānāyāma or control of breath, which formed part of the daily sandhyā (morning, noon, and evening pravers) adoration, was not only an ideal exercise for the lungs, but also

one that penetrated to all parts of the body as any careful student of Yogic exercises can testify. Lastly must be noted the fact that the danda-praddna (handing the staff to the initiated boy) was a regular ceremony, and the staff was certainly an excellent weapon for selfdefence.

5. Manners and Morals, Habits and Customs

Hospitality not only continues to be recognized as a binding social obligation, but is raised to the status of a religious duty, for an offering of food to the guest attains to the rank of a sacrifice as one of the five daily mahayajñas-the atithi-yajña or "guest sacrifice"-which the householder must perform. There is a formal definition of an atithi or guest, and an authorized list of important guests, which includes a teacher, a Ritvik (an officiating priest), a king, a snātaka, a father-ın-law, and a son-in-law. Though a guest could arrive at any time it was understood that a wedding and a sacrifice were the recognized (or official) occasions for their recention in the grand style. A seat (or a special enclosure, if the guest is persona grata), water for washing the feet, argha water, water for sipping, and the madhuparka (a mixture of curds, honey, and ghi) are first offered to him After this, food containing meat is to be offered to him, and if the occasion is a special one (such as a sacrifice or a wedding), a cow is offered and it is for the guest to have it killed for him or to set it free

The Grihya-sitras, while prescribing the code of conduct for a mattaka, give us a fairly detailed account of the manners and etiquette of those days. Only a few rules can be cited here A scent-less wreath is not to be worm. Girls must not be subjected to banter or rdicule. Walking or bathing naked or running without sufficient justification are prohibited There is a taboo on certain words in the language of a mataka ensuring linguistic purity.

Great insistence is laid on moral purity. Self-restraint is the keynote of the ethical code prescribed for the householder. Human nature, of course, is the same in all times and climes, and warnings against the faithlessness of companions, pupils, servants, and wives are conveyed indirectly through rites prescribed for their prevention. Purity of mind is as much inculcated as purity of body. Abstinence of all kinds and respect for elders and for self are valued qualities.

The ancient Indians did not cultivate cleanliness as a mere habit. They had developed a passion for it. The sipping of water (schamana) and washing of feet are insisted on everywhere as a preliminary to any, even the most trivial, ritual act. The partireate strainers or purifiers made of grass), the use of which is so marked in the ritual, are symbols of purity and cleanliness. If a bird befouled the person of a snätaka, or an unknown drop of water fell

on him, mantrax were to be recited by way of expiation. The habit of early rising is also well cultivated.

Life in this age was so thoroughly ritualized that it is difficult to distinguish habits from sacraments. Thus the many rites prescribed for the safety and good health of the mother and child, before and after delivery, may be looked upon as records of remarkable usages also. The rite of Simantonnayana or parting of the hair in the middle in the fourth or seventh month of pregnancy is an interesting custom. The child is given two names of which one is to be kept secret. The occasional counting of years, not from birth but from conception, is a practice that has a parallel in the Buddhist ordinances. The Grihya- and the Dharma-sūtras recognize the force of local custom, and allow it to modify or sometimes even override some of their rules. The father's greeting to the son, when either of the two has returned from a journey, which takes the form of smelling or kissing him on the head, is also a noteworthy custom.

6 Amusements and Entertainments

As in the preceding age, dancing, and both vocal and instrumental music, were well cultivated. In the Simantonnayana ceremony mentioned above, the wife is asked to sing a song merrily, and in the marriage ceremony the bridegroom sings a gāthā after the treading on the stone by the bride The vogue of the musical recitations of the Sāmaveda is responsible for the rule in the Gobhild Grihya-sītira that the Vāmadevya gāna may be sung, by way of a general expiation, at the end of every ceremony. The lute players are asked to play the lute in the ceremony of "parting the hair," and four or eight women (not widows) perform a dance in the marriage ceremony. The restrictive rule that a snātaka is not to practise or enjoy a programme of instrumental or vocal music or dance, shows their popularity It seems that the game of dice was looked upon as a popular entertainment, since a common gaming hall is one of the official public buildings of a town.

The reference in the Maitrāyanīya Upanishad to a naţa (actor) changing his dress and painting himself proves the popularity of dramatic shows in this age.

7. Food and Drink

Rice and barley were evidently the staple articles of diet as they were to be offered into the Grihya fire every morning and evening. Wheat was probably not eaten daily, as it is mentioned but rarely. Beans (māsha), kidney beans (mudga), mustard seed (sarshapa), and sesamum were known.

Milk and its products were very liberally used (ante, p. 461). The various forms of butter (due to its varying temperature) were

distinguished for purposes of the ritual as: clarified (sarpis), melted (sigua), and solid (shrita) butter. Among other esculent things may be mentioned honey and kshāra-lawæra (saline food), which is supposed to be an irritant and an excitant, and therefore to be eschewed in the interests of celibacv.

The culinary art was fairly well developed. The different processes or operations through which the grains passed before being cooked or eaten are indicated in words like akshata-dhāna (unbroken grain), laig (fried grain), and saktu (ground grain). Washing the rice-grains, husking them, baking them, and sprinkling ajya over them, and then taking them out of the oven are the different stages mentioned in the preparation of a sthälipäka. The preparation of a Purodāśa (sacrificial cake) implied great skill in baking as it was baked on a pan with varying number of hollows (resembling saucers) which gave a variety of forms to it An Apūpa was a cake baked on a flat vessel Boiled rice (odana) eaten with ghi, milkrice (pāvasa) which seems to be a preparation very much akin to dudha-pāka so popular in Guiarāt now, krisara (boiled rice mixed with sesamum seeds), dadhimantha and madhu-mantha (cooked ground grains mixed with curds and honey respectively), and rice and barley gruel are other preparations known. The scum of boiled rice made a very light liquid food Vegetable food (śāka) is mentioned as a substitute for flesh-food (māmsa)

But people in this age were by no means vegetarians. They are flesh freely, not excluding even beef which was prohibited later owing to the growing reverence for the cow. Flesh-food must be served to the Brähmapas invited to a Srāddha dinner, vegetable food being allowed only in its absence. Similarly in the ceremony of the first feeding of the child with solid food, among the various foods enumerated in order of merit, the flesh of a goat, partridge, or another (specified) bird, and fish come first, boiled rice mixed with shi coming last. Similarly food offered to a guest of consequence must not be without flesh. The merit of vegetarian diet is, however, recognized in the rule that a student should abstain from flesh.

In spite of condemnation in the earlier texts (ante, p. 462) and severe penalties laid down in the Dharma-sūtras, surf continued to be a favourite intoxicating drink. The four or eight women who give a dance at the marriage ceremony are to be regaled with food and surd. In the Anvashtakya ceremony, surd is to be offered along with the pixla offerings to female ancestors. The Srauta ritual is naturally full of references to the Soma drink in the numerous Soma sacrifices, and the Grihya ritual in the fitness of things ignores it

8. Dress and Decoration

Two pieces of clothing—one the uttariya or upper, and the other the Antariya or lower—constituted the dress proper (the simple two-piece suit) of males and females; the lower garment being put on first and then the upper one. If one could afford only one garment, then a part of the lower garment may be turned into and worn as an upper garment. In the case of a student, the skin of a deer or goat made a very holy upper garment. The grapa-dina pata, mentioned by Pāṇini, is a garment that reached down to the ankles. A longish piece of cloth wrapped round the head in the fashion prescribed by local custom constituted the ceremonial head-wear or turban. The same piece could be used informally to veil the head. Red turbans and clothes were used for magic rites and silk ones (kahauma) for sacrificial purposes

Woollen blankets were in use. In the list of garments prescribed for the upanita (the initiated boy) figure cotton, woollen, linen, and hempen cloth. Silk was also used (as there is a reference to the silk-worm giving silk). Upper garments were dyed with the juice of lodhra flowers or with madder or indigo. Black clothes were also worn (as they are forbidden for one practising the Sākvara vow). The colour scheme of dyed garments prescribed for the upanita is interesting; reddish yellow, light red, and yellow for the Brāhmaṇa, the Kshatriya, and the Vaisya respectively. The art of washing was, of course, known, though a particular sanctity attaches to a brand new (dahata) garment

A pair of garments, a turban, ear-rings, shoes, a bamboo staff, and an umbrella complete the full dress (of a snātaka, for example). The danda (staff) is not only a weapon of defence in the ordinary sense, but also a magic wand for warding off evil. The staff of the upanita boy was to be of palāša, bilva, or nyagrodha (or udumbara) wood, according to his caste. It had to be of a standard height. In

wood, according to his caste. It had to be of a standard neight. In one Grihya-sūtra (the Aśvalāyana) there is an invocation to the shoe not to pinch. So shoes have had a tendency to pinch in all

times and climes!

Two important sacraments—the Chūdā-karman or tonsure ceremony for the child, and the Godāna or the ceremony of hair-cutting at the age of sixteen or eighteen—give us a clear idea of development of the tonsorial art as known and practised in those days. Among the details of the Chūdā-karman are the use of a mixture of hot and cold water to moisten the hair, the tangled locks of which are disentangled with a porcupine's quill—the hair-comb of the ancients—the anointing of the hair with fresh butter, the holding of a mirror before the boy, the use of the razor (with a copper or wooden handle) which makes a sound while it is being plied by the barber on the head, and the leaving of a lock or locks (Chūdā) according to local custom or family usage. A layer of Kwāa grass

is kept ready to receive the hair that is cut off. In the Godâna ceremony, the beard and the hair, both on the head and under the armpits, are shaved and the nails clipped. Generally a top-lock was kept, as a clean-shaven head was not fashionable. The Aśvaläyana and Sźńichayana Grihya-sūtras, strangely enough, prescribe both these rites for girls. Probably local custom determined what quantity of hair was to be kept and in what fashion in the case of both boys and girls. The Sīmantonnayana ceremony (of parting the hair of a pregnant woman mentioned above) clearly shows that the two (shaving) ceremonies did not much affect the growth of hair on 2 girl's head. Does this ceremonial parting of the hair in pregnancy suggest that unmarried girls and married women who were not mothers did not part their hair but merely brushe dit back?

It is noteworthy that the toilet and make-up of the ancient Indians were not as simple as we fondly imagine. Collyrium (anana), an eve-salve, and other salves for anointing the body before the bath and the nose and mouth after the bath, sthagara (a fragrant application) (see ante, p. 463), a bath-powder, and ground sandalwood are among the toilet requisites mentioned in connection with the "bath" ceremony which entitles a student who has completed his studies to become a snataka (graduate) and settle down as a householder by marrying if he so chooses. Garlands and kundalas (an ear ornament) are put on after the snana (bath) gems strung on a wollen or linen cord make at once an ornament and a charm for a bride when tied round her body. A perforated pellet of sandal or Badara wood, overlaid with gold and worn round the neck, and a Badara-man or pellet of Badara-wood tied to the left hand, are among the other known ornaments worn by both males and females with distinction

9 Health and Hygiene

A keen desire to live a long and healthy life of a hundred years was the natural out:ome of the optimistic and robust outlook which the ancient Indians had on life. Their healthy slogan was "prevention is better than cure." Consumption seems to have been a notorious affliction. Epilepsy (Kumāra or Apasmāra), to which children were particularly liable, was very much dreaded and its popular name Svagraha indicates that it was supposed to be a seizure or attack by a dog-demon. Among the symptoms are stiffness of the body and much crying aloud. Another peculiar illness, to which again boys were particularly susceptible, was named Sańkha in which the patient utters tones resembling the sound of a Sańkha (conch) when blown. These diseases were sought to be cured by propitating the demons by means of rites and ceremonies which afford a glimpse into the curious superstitions and magical belief of the period. From the number of rites prescribed during the period of

pregnancy, it seems that a safe delivery was a matter of great concern. Headache and poisonous bites are among the minor ailments receiving ritual treatment

That there were centenarians is seen from the rules in the ceremony of Udakadāna or the offering of water libations to the deceased. Fasts are so often recommended in the ritual that the inference becomes irresistible that the ancient Indians were fully aware of their beneficial effects on health.

A knowledge of hygienic principles may be inferred from many a rule in the Grihya-sūtras. Cleanliness is most stringently enforced and the free use of water is recommended at every step in the ritual for cleansing purposes. A regular daily bath is insisted on. Floors are to be swept, sprinkled over with water, and smeared with cow-dung. There is a peculiar mixture prescribed for smearing the floor and walls of the lying in chamber, which must have been an effective disinfectant. A snātaka is not to spit or eject phlegm in the neighbourhood of water. That special places were set apart to receive dirt, accumulated waste, and sweepings is seen from the direction to offer a bali on such "heaps of sweeping." Easing was to be done on ground covered with grass and not on the bare ground That cow stables and cemeteries were located outside the village or town is seen from the rule which enumerates them among landmarks in a journey along with a forest, a boundary-tree, etc.

2. ECONOMIC CONDITION

1. Agriculture and Cattle

The fact that there is a domestic rite synchronizing with each stage in the agricultural life of the people, and practically none associated with urban life, shows that the Indians of those days lived mostly in villages, and that the village agriculturist was the true representative of ancient India. There are rites for putting the bulls and oxen to the plough, for sowing, and for honouring Stá (lit., the "Furrow") or the Goddess of Agriculture. There is a sacrifice offered to Kshetrapati or the Lord of the Field. The Agrayana sacrifice is the religious ceremony of partiking of the first fruits of the harvest There are further sacrifices signalizing the other agricultural operations such as threshing, the reaping of the crop, and putting it into the harn.

Rice and barley seem to be the staple crops from the reference to the two harvests—that of barley in the hot season and of rice in autumn. From the direction to the satiaka to live on the gleanings of uncultivated corn it may be easily inferred that there were extensive stretches of uncultivated land and forest, and wild rice and grains used to grow on untilled tracts. That a cultivated field was

measured by the quantity of seeds that could be sown in it is seen from the term prāsthika in Pāṇini, applied to a field that accommodated a prastha-full of seeds.

The cattle were an invaluable possession. "Make us rich in cows" is almost the burden of the mantrus that accompany the various Grihya rites. All the three higher classes were engaged in cattle-keeping in their own way. There are ceremonies like the Sulaquau and the Baudhyavihāra for propitiating Rudra and his hosts, so that they may avert evil from cattle and the fields. Cattle served, in a way, as the standard of value or as a medium of exchange, because kings kept their own herds and gave away thousands of cows as dakshinā (sacrificial fees). The Dārshadvata sacrifice, described in the Srauta-sūtras, is virtually a description of the tending of the cows of a Brāhmaṇa in Kurukshetra for one year. The Grihya-sūtras prescribe a number of minor rites on the following occasions:—

- (1) When the cows are led to the pasture lands;
- (2) When they run about;
- (3) When they return; and
- (4-5) before, and after, their entry into the cow-pen

The Srauta-sūtras prescribe sacrifices for the acquisition and recovery of lost cows. Prayers and rites for prosperity in cattle and their good health abound in the Grihya-sūtras There is a ceremony for cattle-breeding called Vrishotsarga on the release of a stud-) bull among the cows. Yakshmā, a wasting disease affecting cattle, was very much dreaded. It was a custom to brand the cows.

But the cows were not prized merely as property. A feeling of reverence for them is rapidly growing. A suspension of study (anadhyāya) is ordered in the presence of cows that have eaten nothing. Persons riding in a chariot are to do homage to a cow, if met with on the way. Paradoxically enough, in the eyes of the ancient Indians, this veneration of the cow is not only not inconsistent with the cow-sacrifice prescribed in funeral ceremonies, on the occasion of a guest-reception, or the Salagava (spitox) sacrifice, but is, in a sense, responsible for it. Nevertheless, the feeling of reverence for the cow went on steadily gathering volume, and the rule for sacrificing a cow went on steadily gathering volume, and the rule for sacrificing a cow was often relaxed by the admissibility of an alternative or substitute ritual whereby the cow was saved.

2. Trade and Commerce. Arts and Industries

There is a rite called paryasiddhi (ensuring success in trade) in which a portion of the particular article of trade is cut off and sacrificed in the fire with the prayer: "If we carry on trade to acquire (new) wealth by means of our (old) wealth, may Soma... prosper that." (Hiranyakesi G. S. I. 15. 1). The Vaisya class was engaged in trade and commerce. The Sütras of Pāṇni refer to im-

ports from the north and his vamisate gava mentions several forestproducts such as Vamisa, Kutaja, Ikahu (sugar-cane) and Madja (liquor). The Grlhya-stitar rule that the relations of a deceased person are not to cook in the house, but to buy food during the period of the death-impurity, shows that food could be bought either from public eating houses (?) or private individuals. A system of coinage or currency was probably in vogue, though quite a large volume of trade was managed by way of exchanges in kind. Pāṇḥin mentions coins like Pāṇa, Kārshāpaṇa, Pāda, and Vāha and measures and weights like Aḍhaka, Achita, Pātra, Drova, and Prastha. But, as noted above, Pāṇhi's date is uncertain, and he probably belonged to a period later than 600 B.C.

Implements and vessels of copper, iron, stone, and earthenware are mentioned and must have been locally manufactured. Golden spoons and brass gongs were in use. Silver was also known. Upper and lower millstones, mortar and pestle, cups, ladles, dishes, spoons, and swords were required for domestic as well as ritual use Baskets made of leaves are referred to Katas or rush mats made of Viriua grass were offered as seats for the married couple. The varieties of cloth worn were cotton, linen, woollen, silken, and hempen. That spinning and weaving were daily occupations of the people is clear from the rule that the initiated boy is to put on a garment spun and woven on the same day, and from the prayers offered to "Goddesses who spun and wove" (Apastamba G. S. IV. 10.10). A Châtrâ or spindle is mentioned. A flourishing dyeing industry may be inferred from the prescription of garments of different colours for the initiated boy.

Many of the occupations, professions, arts, crafts, and industries been already incidentally referred to in the previous sections (also cf. ante, Ch. XXIII, pp. 466-7). We may notice here the profession of the butcher, who was so indispensable in the animal sacrifice that there was actually a priest called Samitri who did the necessary slaughtering to the accompaniment of sacred verses Manual labour was so highly prized that it was compulsory for a student as a householder (snätaks)

3. House-building and Means of Transport

The fact that the Gṛihya-sūtras include the ceremony of house-building among sacraments to be performed by the rich and the poor alike, leads to the obvious inference that in those days of vast open spaces and long stretches of jungle. a site for a house and building materials were available to a poor man of three higher classes at a nominal cost. The site should be undisputed property. It should be non-saline and with trees, herbs, or at least grass, growing thereon. It should not be hollow or undermined and be of the colour prescribed for the particular caste. From the directions

given, we gather that a spacious house contained an assembly or drawing room a provision-room, and a resting or retiring room. with a nursery and privy standing detached from the main building. Measuring the site, digging the pits for the posts, two of which were erected in each of the four directions, setting up the door-jambs and the gable, putting up the beams and the grass or thatch on the roof, are some of the operations detailed. The position of the main door is carefully specified. The setting up of the water-barrel-evidently an arrangement for water supply-is part of the house construction The repairs and renovation of the house are to be effected every year with ceremony about the same time as the Divali holidays of the Hindus From the directions to erect buts and enclosures in the course of a day, it seems these could be improvised with ease The consecration ritual for ponds, tanks, wells, covered reservoirs of water, and gardens, shows that these were public works for general use though they seem to have been constructed by individuals rather than by the state; for the ritual is of the domestic type-

Bridges, roads, cross-ways, and squares where four roads meet are referred to. Among the means of transport may be mentioned the very popular, light two-wheeled wooden carriage (ratha). Horses and oxen (even cows occasionally) were the common draught animals, the elephant being employed for a state journey or a procession. Horses, asses, camels, and elephants were ridden for purposes of travel. Rivers were crossed by ratts and boats, and if necessary by ships

¹ The list as given in Chhandogue, 7. 1, 2 and as repeated several times in the following sections. The interpretation of the technical terms denoting different branches of knowledge is not always easy. Max Millier takes Brahmat-edge as three of the Vedangas (us., fishela, Kafpe, and Chhandas); Development-tidge playing, and other fine arts"; Pirup as "the rules for the sacrifices for the sneedors"; and the Veda of the Vedas as grammur (SBE, I, pp. 109-13).

GENERAL BIBLIOGRAPHY

I. ORIGINAL SOURCES

(A detailed account of the literatume of the age has been given in Chapters XII, XVI, XX, and XXIV. A saler! list of inportant texts, with translations, is given below. Further accounts of individual texts will be found in Winternitz, History of Indian Literature, vol. I and the other Histories of Literature mentioned in section II, B of this bibliography.

Aitareya Aranyaka: Text ASS. No. 37, Poona, 1898. Ed. with a trans. by A. B. Keith, Oxford, 1909.

Aitareya Brāh- Ed. Th. Aufrecht. Bonn, 1879.

mana: Ed. K. S. Agashe. Poona, 1896.

Trans. by Keith HOS, Vol. XXV. Cambridge, Mass. 1920.

Apastambiya Ed. by G. Bühler (Bombay Sanskrit Series),
Dharmasūtra: 1892, 1894.

Apastambiya Ed. by R. Garbe Calcutta, 1882-1902.
Srautasūtra:

Arsheya Brāhmana: Ed. by A. C. Burnell. Mangalore, 1876. Aśwalāyana Grihyasūtra:

Atharvaveda: Ed. R. Roth and W. D. Whitney. Berlin, 1856. Ed. with Sayana's Comm. by S. P. Pandit.

Bombay, 1895-8.
Trans. by W. D. Whitney. Cambridge, Mass.,

U.S.A., 1905. Trans. in part. M. Bloomfield SBE, Vol. XIII.

Oxford, 1897.

Baudhāyana Dhar- Ed. by E. Hultsch. Leipzig, 1884.

maśśstra:
Baudhāyana Ed. by R. Shama Sastri. Mysore, 1920.

Grihyasütra:
Baudhäyana Ed. by W. Caland. Calcutta, 1904-23.

Srautasūtra:
Brihadāranyaks
Upanishad:
Leipzig, 1889.
Upanishad:

Chhandogya Ed. with trans. by O. Böhtlingk. Leipzig, 1889.
Upantshad:
Daipata Brāhmana: Ed. by Jivananda Vidyasagara. Calcutta, 1881.

Gautama Dharma- Text ASS, Tr. SBE, II.

Gopatha Brahmana: Ed. by Rajendralal Mitra and H. Vidyabhushan. Calcutta, 1872. Kapiskhala Katha Ed. by Raghu Vira. Lahore, 1932.

Samhitā: Kāmhitā: Ed. by Von Schroeder. Leipzig, 1900-11. Kātuāugna Synuta: Ed. by Vidyadhara Sarma. Benares, 1933-7.

sitra:

Kaushitaki Brāhmana:

Ed. by E. B. Cowell. Calcutta, 1861. Trans. by
Keith. HOS, XXV. Cambridge, Mass., 1920.

V.A.~44

Khādira-Grihyasütra: Maitrāvanī Samhitä:

Nirukta:

Panchavirhia Brāhmana: Pāraskara Grihuasétra: Rigveda:

Ed. by A. Mahadeva Sastri and L. Srinivasacharya. Mysore, 1913, Ed. by Von Schroeder, Leipzig, 1881-6.

Ed. with Durgacharya's Comm. by V. K. Rajavade. Poona, 1921-26. Ed. and trans. by L. Sarup, Two vols, Labore,

Ed. by A. Vedantavagisa, Calcutta, 1869-74.

Ed. by Gopal Shastri Nene. Benares, 1926.

Samhita and Pada text with Savana's Comm. Ed. by F. Max Müller (second edn.). 1890-2. Samhita and Pada text with Sayana's Sammita and rada text with Sayana scomm. critically edited by Vaidika Saniso-dhana Maodala, Poona, Four vols. 1933, etc. Trans. by H. Grasmann Leipzig, 1876-7; R. T. H. Griffith. Benares, 1896-7; in part, by Max Müller. SBE. vol. XXXII, Oxford, 1891, and H. Oldenberg, SBE, Vol. XLVI.

Oxford, 1897.

Ed. with trans. by Th. Benfey. Leipzig, 1848. Ed. by Satyavrata Samasrami, Calcutta, 1873. Ed. by A. C. Burnell, London, 1873.

Sāmavidh**āna** Brāhmana: Samhitopanishad Brāhmana:

Sāmaveda:

Śāṅkhāyana Aranyaka: Ed. by A. C. Burnell. Mangalore, 1877. Ed by Friedlander. Berlin, 1900 (I-II); E. B. Cowell, Calcutta, 1861 (III-VI); A. B. Keith Oxford, 1909 (VII-XV). Trans. by

A. B. Keith. London, 1908. Ed. with Comm. of Varadatta-suta Anartiya and Govinda, by A Hillebrandt. Calcutta,

Srautasūtra: Satapatha Brāh-

Śńikhāuana

1886-9. Ed. by A. Weber. London, 1885. Trans. by J. Eggeling. SBE, XII, XXVI, XLI, XLIIII, XLIV. Oxford, 1882-1900.

mana: Shadvinsa .Brāhmana: Taittirīya

Ed. by Jivananda Vidyasagara Calcutta, 1881. Ed. by H. F. Eelsingh. Leyden, 1908. Ed. by R. Mitra, Calcutta, 1855-70. Ed. by A. Weber. Berlin, 1871-2; with the

Comm. of Madhava, Calcutta, 1854-99.

Brāhmana: Taittirīva Samhitā:

Taittiriva Upanishad:

Vājasaneyi Samhitā: Vamša Brāhmana:

Vasishtha

Ed. with Comm. of Sankara. ASS, fifth edn. Ed. with Mahidhara's Comm. by A. Weber. London, 1852. Ed. by A. C. Burnell. Mangalore, 1873. Ed.

by A. Weber. Ind. Stud. IV, pp. 371 ff. Ed. by A. A. Führer. Bombay, 1916.

Dharmasütra:

Poona, 1929.

GENERAL BIBLIOGRAPHY

Yajurveda:

See Taittiriya Samhita, Kapishthala-Katha-Samhita, Kathaka Samhita, Maitrayana Samhita and Vajasaneyi Samhita.

Translations of Collected Works

 The principal Upanishads have been translated by F. Max Müller in SBE, I, XV, and by R. A Hume in Thirteen Principal Upanishads, Oxford, 1921.
 The Grihya-sūtras of Sānkhāyana, Aśvalāyana, Pāraskara,

 The Grihya-sutras of Sänkhäyana, Aśvaläyana, Päraskara, Khādira, Gobhila, Hiranyakeśin and Apastamba have been translated by H. Oldenberg in SBE, XXIX and XXX.

been translated by H. Oldenberg in SBE, XXIX and XXX.

The Dharma-sūtras of Apastamba, Gautama, Vasishtha and
Baudhāyana have been translated by G. Bühler in SBE,
II and XIV.

II. MODERN WORKS

- A. Histories of Ancient India (which prominently deal with the Vedic Age).
- 1. Cambridge History of India. Vol I. Cambridge, 1922.
- 2. DUTT, R.C. History of Civilisation in Ancient India. London, 1893.
- 8. Mookerji Hindu Civilisation. London, 1936.
 Radhakumud
- 4. OLDENBERG H Ancient India (second edn.). Chicago, 1898.
- 5. RAPSON, E J. Ancient India Cambridge, 1914. 6. RAYCHAUDHURI. Political History of Ancient India (fourth H. C. edn.). Calcutta, 1938.

B Histories of Literature

- FARQUHAR, J. N An Outline of the Religious Literature of India. Oxford, 1920.
- FRAZER, R. W. Literary History of India. London, 1898.
 HENRY, V. Les Litteratures de l'Inde. Paris, 1904.
- 4. Kane, P. V. History of Dharmasastra. Three vols. Poona, 1930, 1941, 1946.
- MACDONELL, A A History of Sanskrit Literature. London, 1900.
- Max Müller, F.
 History of Ancient Sanskrit Literature (second edn.). London, 1860.
 Oldenbergh, H.
 Die Literatur des alten Indien. Berlin, 1903.
- 8. PISCHEL, R. Die indische Literatur, "Die Orientalischen Literaturen," Die Kultur Gegenwar, I, vii. Replin und Leinzig 1906
- Berlin und Leipzig, 1906
 9. VAIDYA, C V. History of Sanskrit Literature, vol. I: Sruti
 (Vedic) Period. Poona, 1930.
 10. Weber, A. History of Indian Literature (Eng Trans. by J.
- Mann and Th. Zachariae) (second edn.). London, 1882.
- 11. WINTERNITZ, M. History of Indian Literature (Eng. Trans. by Mrs. S. Ketkar), vol. I. Calcutta, 1927.

C. General Works

IYENGAR, P.T.S. Life in Ancient India. Madras, 1912.
 KABGI, A. The Rigueda, Trans. by R. Arrowsmith. Boston, 1886.

- 8. MacDonell, A. A. Vedic Index. London. and Kerre, A. B.
- 4. MUIB, J. Original Sanskrit Texts, London.
- OLDENBERG, H. Rigveda forschung. Berlin, 1905. Vedische Studien. Stuttgart, 1889-1901.
- 6. PISCHEL, R. and GELDNER, K. F.
- 7. ROTH, R. Zur Litteratur und Geschichte des Veda. Stuttgart, 1846.
- 8. VON SCHROEDER, Indiens Literatur und Kultur. Leipzig, 1887.
- 9. ZDOGER, H. Altindisches Leben, Berlin, 1879.

BIBLIOGRAPHY

CHAPTER III

Archaeological Explorations and Excavations

1. The publications of the Archaeological Survey of India. viz.: Reports by Cunningham (23 vols.). Annual Reports and Reports of Circles (since 1902-3).

Memoirs (67 vols.). New Imperial Series.

- 2. Archaeological Survey Reports of Indian States (Baroda, Gwalior, Hyderabad, Mysore, Jaipur, etc.).
- 8. CUMMING. Size. Revealing India's Past (London, 1939). (It JOHN. gives a complete bibliography of Archaeo-logical publications up to 1939.).
- 4. DOKSHIT, K. N. The Progress of Archaeology in India in the
- past 25 years. Dikshit, K. N. An Outline of Archaeology in India (included in "An Outline of the Field Sciences of India" published by the Indian Science Congress. Calcutta, 1937).

CHAPTER IV

The Geological Background of Indian History

- Brown, J. C. Catalogue of Pre-historic Antiquities in the Indian Museum at Calcutta, Simla, 1917.
- 2. BURRARD, SIR The Geography and Geology of the Himalaya Mountains Delhi, 1932. S. G. and HERON, A. M.
- Ancient Geography of India. Trubner, Lon-3. CUNNINGHAM, A. don, 1871. 4. DE TERRA, H. and Studies on the Ice Age in India and Associat-
- PATERSON, T. T. ed Human Cultures, Carnegie Inst., Washington, 1939. 5. FOOTE, R. B. "Discovery of Pre-historic Remains in India."
- Geol. Mag. London, I. X, 1873. HAYDEN SIB H. N. "Relation of the Himalayas to the Indo-Gan-getic Plain and the Peninsula." Rec. Geol. Surv. Ind., vol. XLIII, Pt. 2, 1913.
- 7. MITRA, P. Prehistoric India. Calcutta University, 1927. "The Lost River of the Indian Desert," CR. OLDHAM, C. F.
- vol. LIX, 1874. "The Structure of the Indo-Gangetic Plains."

 Mem. Geol. Surv. Ind., vol. XLII, 1917. 9. OLDHAM, R. D.
- "The Siwalik Primates and Their Bearing on the Question of Evolution of Man." Rec-10. PILGRIM, G. E. Geol. Surv. Ind., vol. XLV, 1915.
- 11. WADIA, D. N.
- Geology of India. Macmillan, London (third edn.), 1939. "Post-Tertiary Hydrography of Northern India." Nat. Inst. Sc. Ind., vol. IV, 4, 1938. 12. WADIA, D. N.

CHAPTER V

The Geographical Background of Indian History

Imperial Gazetteer of India. Oxford, 1907-9.

HOLDIGH, T. H. India (Regions of the World Series). Oxford,

HOLDICH, T. H. 1905.

The Gates of India. London, 1910.

MACKINDER, H. J Eight Lectures on India. London, 1910.

A New Geography of the Indian Empire. London, 1909.

CHAPTER VI

I. Flora

 Biswas, K Presidential Address. Sec. of Botany, Ind. Sc. Congress, 1943.

2. BART, B. C. Agriculture and Animal Husbandry in India.

Silver Jub. Session, Ind. Sc. Cong., 1937.

An Outline Vegetation of India Silver Jub.
Session. Ind. Sc. Cong., 1937.

4. ORATTERJEE, D. "Studies in the endemic flora of India,"

JRASH(S), V. 19 ff.

5. DAS GUTTA, A. Economic and Commercial Geography, 1941.

5. DAS GUPTA, A.
6. HOOKER, J. D.
7. HOOKER, J. D.
Imperial Gazetteer of India, vol. 1 (Botany),

s. Hooker, J D Introductory Essay to the Flora Indica, 1855 and Thomson J

2. Fauna

1 Fauna of British India.

2. GHARPUREY, The Snakes of India. Bombay, 1937

K G., Lr. Con.
3. Imperial Gazetteer of India. I, 1909.

 RAO, H S. An Outline of the Fauna of India. Calcutta, 1937.

5. Salim Ali The Book of Indian Birds. Bombay, 1941 6. Whistler, Hugh Popular Handbook of Indian Birds. London, 1935.

CHAPTER VII

Palaeolithic, Neolithic and Copper Age (Cf. also Bibliography to Ch. IV.)

 Brown, J. C. Catalogue of Pre-historic Antiquities in the Indian Museum at Calcutta, 1917.

 CAMMIADE, L. A. and BURKETT, M. C. "Fresh Light on the Stone Age in South-east India." Antiquity, IV (1930, pp. 327-39).

3. CHARBAVARTI, The Pre-historic periods in India. JUB, X, S.N. Part I (1941).

4. CHARRAVART, "An Outline of the Stone Age in India."
S. N. JASB(L), R, pp, 81-98.
5. DAS GUPPA, H.C. "Bibliography of Prehistoric Indian Antiqui-

Das Guffa, H. C. "Bibliography of Prehistoric Indian Antiquities." JASB, XXVII, 1931, No. 1.

6. De Terra, H. "The Siwaliks of India and Early Man." Early Man. 1939.

BIBLIOGRAPHY

7.	DE TERRA, HELLMUT' MOVIUS and HALLAM L.	"Research on Early Man in Burma." sactions of the American Philoso Society, vol. 32, Part iii (1943), pp. 34	mhical
_	70		

8. FOOTE. Indian Prehistoric and Protohistoric Antiquities, Notes on their Ages and Distribution, 1916.

9. GROWER, G. S. "Megalithic Monuments," NIA, VI, pp. 26-87, 100-39. Pelimingry Report of the Third Chiange

10. KAEVE and SARKALIA.

11. Ras. A. R.

Catalogue of Prehistoric Antiquities from

Adichanallur and Perumbair, 1915

12. Sankalla, H. D. Investigations into Prehistoric Arteneology of Gujarat, Sri-Pratapsimha Mahārājā Rā-

jyäbhisheka Granthamälä, Memoir No. IV, Baroda, 1946. See also Proceedings of the Science Congress, Archaeological Reports (see under Ch III).

CHAPTER VIII

Race Movements and Prehistoric Culture

- Anderson, J. D. Peoples of India. Cambridge, 1913.
- BAGCHI, P.C. Pre-Aryan and Pre-Dravidian in India. Calcutta University, 1929
- 8 BAINES, A. Ethnography. Strassburg, 1912.
- 4. CALDWELL. Comparative Grammar of the Dravidian Language.
- Caldwell. The Census of India (Reports for 1901, 1911, 1921, 1931, 1941).
 Chanda, R. P. The Indo-Aryan Races. Rajshahi, 1916.
- 7. CHATTERJI, S K "Non-Aryan Elements in Indo-Aryan." JGIS, II, 42. 8. CHATTERJI, S K "Dravidian Origins and the Beginnings of
- 8. CHATTERJI, S. K "Dravidian Origins and the Beginnings of Indian Civilization." MR, Dec. 1924.
 9. CROOKE, W. The Tribes and Castes of the North-West Pro-
- vinces and Oudh Calcutta, 1896.
 10. Gura, B. S An Outline of the Racial Ethnology of India.
- Calcutta, 1937.

 11. Guna, B. S. Racial Elements in the Population (Oxford Pamphlets on Indian Affairs, No. 22; Oxford
- University Press, Bombay, 1944).
 12. IYERGAR, P. T. 8 Pre-Argan Tamil Culture. Madras, 1930.
 13. RISLEY, H. H. Tribes and Castes of Bengal. Calcutta, 1891-2.
- 14. RISLEY, H. H. The People of India (second edn.). London, 1915.
- THURSTON, Eard The Castes and Tribes of Southern India. RANGACHARI, K. Madras, 1909-10.

For a full descriptive bibliography on the question of non-Aryan elements in the civilization of India, cf. Constantin Régamey, "Bibliographie Analytique des Travaux relatifs aux Eléments anaryens dans la civilization et les langues de l'Inde" in BEFEO, vol. 34, 1935, pp. 429-565.

CHAPTER IX

he Indus Valley Civilization

	The Indus Valley Civilization				
1.	APTE, D. N.	Hindi-Sumeri Sańskriti (in Marathi). Poona, 1928.			
2,	ARAVAMUTHAN, T. G.	Some Survivals of the Harappa Culture. Bombay, 1942.			
8.	Ayyab, R. S. V.	The Indo-Sumero-Semitic-Hittite Problems. Madras, 1932.			
4.	Banerji, R. D.	"Dravidian Civilization." MR, Sept. 1927, pp. 304-14; Nov. 1927, pp. 552-9.			
5.	Banerji, R. D.	"The Indian Affinities of the Ainu Pottery." JASB, XXIII, pp. 269-72			
6,	Banerji-Sastri, A.	Asura India. Patna, 1926.			
7.	Banerji-Sastri, A.	"Remains of a pre-historic civilization in the Gangetic Valley." JBHS, III, pp. 187-91.			
8.	Brasley, H. G.	"The Script of Mohenjo-daro, Harappa and Easter Island." Man, XXXVI, No. 199			
9.	Bhandarkar, D. R.	"Siva of prehistoric India." JISOA, V, pp. 74-7.			
10.	BHANDARKAR, D. B.	Some Aspects of Ancient Indian Culture. Madras, 1940.			
11.	BILLIMOBA, N. M	"Excavations of prehistoric places in Sind." JSHS, II, pp. 9-17.			
12.	BILLIMORIA, N. M.	"The Script of Mohenjo-daro and Easter Island." ABORI, XX, pp. 262-75.			
18.	BROWN, W. NORMAN.	"The Beginnings of Civilization in India." JAOS, LIX, Supp., pp. 32-44.			
14.	CADELL, SIR P.	"Who are the Descendants of the People of Mohenjo-daro?" Anthrop. Soc. Bom, Jub. Vol., pp. 20-30.			
15.	CABLETON, P.	Buried Empires. London, 1939.			
16.	CHANDA, B. P.	"The Indus Valley in the Vedic Period."			
	•	MASI, No. 31. Calcutta, 1926.			
17.	CHANDA, R. P.	"Sind Five Thousand Years Ago." MR, LII, pp. 151-60.			
18.	CHANDA, R. P.	"Survival of the prehistoric Civilization of the Indus Valley." MASI, No. 41. Calcutta, 1929.			
19.	CHAUDHURI, N. M.	"The Pamirian Alpines in the Indus Valley in Chalcolithic Times." CR, June, 1945.			
20.	CHAUDHUBY, N.C.	Mohenjo-daro and the Civilization of An- cient India with reference to Agriculture. Calcutta, 1937.			
21.	Cettles, V. G	New Light on the Most Ancient East. London, N. Y. 1934.			
22.	Diksett, K. N.	Prehistoric Civilization of the Indus Valley. Madras, 1939.			
23.	Rebenyels, Babon Omab. Rolf	"The Indus Civilization and Ethnographic Research in the Mediterranean Basin." JSHS, IV, pp. 90-8.			

BIBLIOGRAPHY The Age of the 'In CS, VI, pp. 433-6.

IC, I, pp. 50-6.

"The Age of the 'Indus Valley Civilization'."

"Un element mesopotamian dans l'art de l'Inde." JA, CCXVII, pp. 298-302.

"Exploration of prehistoric mounds in Baluchistan." ABIA, 1929, pp. 14-8.

"Latest Attempts to read the Indus Script."

"Mesopotamian and Early Indian Art." Études d'orientalisme, Paris, 1932, pp. 203-53.

"The Punch-marked Coins: a survival of the Indus Civilization." JRAS, 1935, pp. 307-18

"A Sumero-Babylonian Inscription discovered at Mohenjodaro. IC, III, pp. 663-73.

24. FABBE, C. L.

25. FABRE, C. L.

26. FABRI, C. L.

27. FABRI, C. L.

28. FARRI. C. L.

29. FABRI. C. L.

20. FABRI. C. L.

81,	Frankfort, H.	Archaeology and the Sumerian Problem. Chicago, 1932.
82.	Frankfort, H.	Cylinder Seals. London, 1939.
88.	Frankfort, H.	"The Indus Civilization and the Near East. ABIA, 1932, pp. 1-12.
84.	FRIEDERICHS, H.F.	Der Alte Orient. 1933.
85.	FRIEDERICHS, H. F., and MULLER H. W.	"Die Rassenelemente im Indus-Tal während des 4. und 3. vorchristlichen Jahrtausend und ihre Verbereitung." Anthropos, XXVIII, pp. 383-406.
86.	GADD, C. J.	"Seals of Ancient Indian Style found at Ur." PBA, XVIII, pp. 1-22.
87.	GANGULY, K. K.	"A Note on the Nose-ornament in Mohenjo- daro." IC, V, pp. 342-3
88.	Gortz, H.	Epochen der indischen Kultur. Leipzig, 1929.
89.	Gordon, D. H and Gordon M. E.	"Survivals of the Indus Culture." JRASB(L), 1940, pp. 61-71.
40.	GUHA, B. S.	"New Light on the Indus Valley Civilization." SC, II, pp. 49 f.
41.	Hargreaves, H.	"Excavations in Baluchistan, 1925." MASI, No. 35, Calcutta, 1929.
42.	Heras, H.	"Chanhu-daro and its Inscriptions," St. Xavier's College Mag., Feb. 1937.
48.	Нявая, Н.	"Further Excavations at Mohenjo-daro." NR, Jan. 1939, pp. 64-75.
44.	Heras, H.	"Karnatak and Mohenjo-daro." KHR, IV, pp. 1-5.
45.	Heras, H.	"The longest Mohenjo-daro Epigraph." JIH, XVI, pp. 231-8.
46.	Heras, H.	"Mohenjo-daro—The most important archaeo- logical site in India." JIH, XVI, pp. 1-12.
47.	Heras, H.	"Mohenjo-daro, the People and the Land." IC, III, pp. 207-20.
		541

	THE VEDIC AGE				
48.	Heras, H.	"The Numerals in the Mohenjo-dard Script." NIA, II, pp. 449-59.			
49.	Heras, H.	"The Religion of the Mohenjo-daro People according to the Inscriptions." JUB, V, pp. 1-29.			
50.	Heras, H.	"A supposed Sumero-Babylonian Inscription discovered at Mohenjo-daro." IHQ, XIII, pp. 697-703.			
51.	Heras, H.	"Two Proto-Indian Inscriptions from Chanhu- daro." JBORS, XXII, pp. 308-20.			
52.	Heras, H.	"Tree Worship in Mohenjo-daro." Anthrop. Soc Bom., Jub. Vol., pp. 31-9.			
53.	Heras, H.	"Were Mohenjo-Darians Aryans or Dravi- dians?" JIH, XXI, pp. 23-33.			
	HERTZ, A.	"The Origin of the Proto-Indian and the Brāhmi Scripts." IHQ, XIII, pp. 389-99.			
55.	HEVESY, G DE.	"Sur une Ecriture Ocêanienne paraissant d'origine néolithique." Bulletin de la So- ciété Prehistorique. Française, 1933, pp. 433-49.			
	Hevesy, G. de	"On a Writing Oceanique of Neolithic Origin." (Eng Version) JIH, XIII, pp. 1-17.			
57.	HEVESY, G. DE.	"Osterinselschrift und Indus-schrift." OLZ XXXVII, pp. 665-73.			
58. 59,	HROZNY, B. HUNTER, G. R.	O Nejstarsím Stěhováni Národů A O Problému Civilisace Proto-Indické. Praha, 1939. "Mohenjo-daro—Indus Epigraphy" JRAS,			
	W 0 D	1932, pp. 466-503.			
6 0.	HUNTER, G R.	The Script of Harappa and Mohenjo-daro and its Connection with other Scripts. London, 1934.			
61.	Jayaswal, K. P	"The Punch-marked Coins: a survival of the Indus Civilization." JRAS, 1935, pp. 720 f.			
62.	Jayaswal, K. P.	"The Wikramkhol Inscription." IA, LXII, pp. 58-60.			
68.	Joseph, P.	"The Extent and Influence of the Indus Civilization." JOR, XI, pp. 246-50.			
64.	Keith, A. Berriedale.	"The Aryans and the Indus Valley Civilization." Ojha Vol., Sect. I, pp. 58-66.			
65.	Keith, Sir Arthur.	"The Ancient Mesopotamia of India," ILN, Dec. 19, 1931, pp. 1000-4.			
6 6.	Law, N. N.	"Mohenjo-daro and the Indus Civilization." IHQ. VIII, pp 121-64.			
67.	Lüders, H.	"Philologie, Geschichte and Archaeologie in Indien." ZDMG, N.F., VIII., pp. 1-20.			
68.	LUDEES, H.	"Die Ausgrabungen von Mohenjo-Daro." ZDMG, NS, XIII, p. 22 f.			
69.	MACKAY, E. J. H.	"Arts and Crafts in the time of Mohenjo- Daro." IAL, XIII, pp. 73-89.			

BIBLIOGRAPHY

70.	MACKAY, B. J. H.	"Bead Making in Ancient Sind." JAOS, LVII, pp. 1-15.
71.	MACKAY, E. J. H.	Chanhu-daro Excavations (1935-36). New Haven, 1943.
72.	Mackay, E. J. H.	"Early Culture at Chanhu-Daro." Disconery
78.	Maoray, E.J.H.	Sept. 1937 pp. 286-9. "Excavations at Chanhu-Daro in 1935-36."
74.	Macray, E. J. H.	ABIA, X, pp. 20-4. "Excavations at Chanhu-Daro." JRSA, 1937, pp. 527-45.
75,	Macray, E J. H	Further Excavations at Mohenjo-Daro. 2 vols. Delhi, 1938.
76.	Magray, E J. H.	"Further Links between Ancient Sind, Sumer and Elsewhere." Antiquity, V, pp. 459-73.
77.	MACKAY, E.J. H.	and Eisewhere. Antiquity, v, pp. 459-13.
		The Indus Civilization. London, 1935.
78.	MAHIRCHAND, BHEBUMAL	Mahan-jo-Daro. Karachi, 1933.
79.	Majumdar, N G.	"Explorations in Sind." MASI, No. 48. Delhi, 1934.
80.	Marshall, sir. John.	Mohenjo-Daro and the Indus Civilization. 3 vols. London, 1931.
81.	Merigoi, Von. P	"Zur Indus-Schrift" ZDMG, 1934, XII, pp. 198-241.
82.	MITEA, PANCHANAN	"Racial and Cultural Interrelations between India and the West at the Dawn of the Age of Copper" IHQ, XI, pp. 699-709.
88	MORGAN, J. DE.	Prehistoric Orientale, 3 vols. 1925-7.
84.	MULLER, H. W and HEINZ, E. F	"Die Rassenelemente in Indus. Anthropos, Band XXVIII. Wien, 1933
85,	OTTO, E	"Die Indus-Schrift. Ihre Entzifferungs-und Einordnungsversuche." Zentralblatt für Bib- liotek, Wesen. LIII, Heft 3, pp. 109-14.
86.	PETRIE, SIR FLINDERS	"Mohenjo-daro." AE, June 1932. "A Comparison between signs of the 'Indus
87.	Piccoli, G.	Script' and Signs in the Corpus Inscriptionum Etruscraum." IA, LXII. pp. 213-5.
88.	PRAN NATH.	"The Scripts on the Indus Valley Seals, I and II." IHQ, VII, Suppl., pp 1-52: VIII, Suppl., pp. 1-32.
89.	PRAN NATH.	"The Script of the Indus Valley Seals." JRAS, 1931, pp. 671-4.
90.	PRAN NATH.	"Sumero-Egyptian Origin of the Aryans and the Rigveda." JBHU, I, pp. 303-58.
91,	Prashad, B.	"Animal Remains from Harappa." MASI, No. 51. Delhi, 1936.
92.	Prashad, B.	"Cattle of the Indus Valley Civilization." CR,

"Authors of the Indus Culture." ABORI.

XVIII, pp. 385-95.
"The Indus Valley Civilization: Two Views."

Jan. 1935.

93. PUSALKER, A. D.

H. G. and VENEATESWARA, S.V.

94. RAWLINSON,

THE VEDIC AGE				
95. Ross, A. S. C.	"The direction of the Mohenjo-Daro Script." NIA, II, pp. 554-8.			
96. Ross, A. S C.	"The Numeral Signs of the Mohenjo-Daro Script." MASI, No. 57. Delhi 1938.			
97. Roy, Binode Bihari.	"Harappa and the Vedic Hariyupia." JBORS, XIV, pp. 129 f.			
98. Sankarananda, Swami.	Rigvedic Culture of the Pre-Historic Indus. Vols. I-II. Calcutta, 1943, 1944.			
99. SABKAR, S. S.	"Disposal of the Dead at Harappa." SC, III,			
100 SARUP, L.	"The Rigveda and Mohenjo-Daro." POC, VIII, 1-22, also, IC, IV, pp. 149-68.			
101. Sastri, S. Srikantra.	"Proto-Indian Ceramics." IHQ, XVI, pp. 511-28.			
102. Sastri, S. Srikantha.	Proto-Indic Religion. Bangalore, 1942.			
103. SASTRI, S	"Studies in the Indus Scripts." QJMS, XXIV,			
SRIKANTHA.	pp. 224-30; 335-42.			
104. Sastri, S. Srikantha.	"Hieroglyphic Hattili and Proto-Indic Scripts." BV, IV, pp. 1-17.			
105. SHEMBAVNEKAR,	"The Identity of the Indus Valley Race with			
K. M.	the Vāhīkas." IHQ, XII, pp. 477-84.			
106. SPEISER, E. A.	"On some important Synchronisms in Pre- historic Mesopotamia." AJA, XXXVI, pp. 465-71.			
107. Spriser, E. A.	Mesopotamian Origins. Philadelphia, 1930.			
108. STEIN, SIR AUREL	"An Archaeological Tour in Waziristan and Northern Baluchistan." MASI, No. 37, Cal- cutta, 1929.			
109. STEIN, SIR AUREL.	Archaeological Reconnaissances in North- Western India and South Eastern Iran. London, 1937.			
110. STEIN, SIR AUREL.	"An Archaeological Tour in Gedrosia." MASI, No. 43. Calcutta, 1930.			
111. STEIN, SIR	"An Archaeological Tour in Upper Swat and Adjacent Hill Tracts." MASI, No. 42. Cal-			
AUREL.	cutta. 1930.			
112. STEIN, SIR AUREL.	"The Indo-Iranian Borderlands: Their Pre-			
AUREL.	history in the Light of Geography and of Re- cent Excavations." JRAI, LXIV, pp. 179-202.			
118. SUR, A. K.	"Indian Script Paleontology." CR, 1933. pp. 261-5.			
114. Sob, A. K.	"Origin of the Indus Valley Script." IHQ, IX, p. 582.			
115. Thomas, E. J.	"Interpretation of the Indus Seals." IHQ, XVI, pp. 683-8.			
116, THOMAS, F. W.	"Mohenio-Daro and the Indus Civiliza- tion." JRAS, 1932, pp. 453-66. (Review.)			
117. VATS, M. S.	Executions at Harappa, 2 vols. 1940.			
118. VENEATESWARA, S. V.	"The Antiquities of Harappa and Mohenio-			
119. WADDELL, L. A	Daro." AP, 1830, pp. 11-15. The Arvan Origin of the Alphabet: Disclosing			
,,	the Sumero-Phoenician parentage of our Letters ancient and modern. London, 1927.			
	44			

BIBLIOGRAPHY

- 120. WADDELL, L. A. The Makers of Civilization in Race and History.
 London, 1929.
- 121. Woollar, C. L. The Sumerians, 1928.
- 122. Woolley, C. L. Ur of the Chaldees. London, 1929.

CHAPTER X. XI

The Aruan Problem and Indo-Iranian Relations

- 1. Brandenstein. Die erste indogermanischen Wanderung, Wein. 1936.
- 2, CHILDE, V. G. The Aryans. New York, London, 1926.

 8. CHRISTERSEN, A. Kulturdeschichte des alten Orients
- 8. Christensen, A. Kulturgeschichte des alten Orients.
 4. Gilbs, G. P. Articles in Encyclopaedia Britannica (Aryans,
- Indo-European Languages).
 5. Hebzfeld, E. Iran in the Ancient East. 1941.
- 6. Hirt-Fests- Heidelberg. 1936.
- 7. Hirr, H. Die Indogermanen, ihre Verbreitung, ihre Ur-
- heimat, und ihre Kultur. Strassburg. 1905 and 1907.

 8. Jackson, Notes and Allusions to Ancient India in Pahlavi Literature, etc. Festschrift Ernst Win-
- disch (pp. 209-12).
- 9, MEYER, E. Geschichte des Altertums. 10. MUCH H. Die Heimat der Indogermanen in Lichte der
- Urgeschichtlichen Forschung. Jena, 1904.
 11. Nehring. Studien Zur indegermanischen Kultur und
- Urheimat.

 12. REINACH, S. L'Origine des Aruens. Paris, 1892.
- 18. S. IBGEL, F. Die arische Periode und ihre Zustande. Leip-
- zig, 1887. 14. Schrader, O. Reallexikon der indogermanischen Altertums-
- kunde. Strassburg, 1901.

 Sprachvergleichung und Urgeschichte. Jena, 1908-7. (Eng. trans. by F. B. Jevons under the title Prehistoric Antiquities of the Ar-
- yan Peoples. London, 1890). 16. Schrader, O. Die Indogermanen. Leipzig, 1911.
- 17. TAYLOR, I. The Origin of the Aryans, London, 1889.
- 18, TILAR, B. G. Orion.
 19, TILAR, B. G. The Arctic Home in the Vedas.

CHAPTERS XIII-XV

Aryan Settlements in India and Traditional History (For Original Sources see under General Bibliography.)

MODERN WORKS

- 1. BANEBJI SASTRI, Asura India, Patna, 1926.
- A.
 2. BRANDARKAR,
 D. R.

 "Aryan Immigration into Eastern India."

 ABORI, KII, pp. 103-16.

8. BHANDARKAR. "Lectures on the Ancient History of India." Carmichael Lectures, 1918. Calcutta, 1919. D. R. 4. BHANDARKAR. Some Aspects of Ancient Indian Culture, Mad-D. R. ras, 1940.

5. CHARLADAR, "Aryans in Eastern India in Rigvedic Age." H.C. MR, Jan. 1930, pp. 40-44.
"Eastern India and Aryavarta." IHQ, IV, pp.

6. CHAKLADAR. H.O. 84-101.

7. CUNNINGHAM. A. The Ancient Geography of India. Ed. by S. N. Majumdar. Calcutta, 1924.

Rigvedic India. Vol. I. Calcutta, 1921. 8. Das. A. C. 9. DEV. N. L.

The Geographical Dictionary of Ancient and Mediaeval India (second edn.). London, 1927. 10. DIESETTAR, "Anthropo-Geography of Vedic India." JMU.

V. R. R. 16, pp. 23-37. "Aryanization of East India (Assam)." IHQ, 11. DIESHITAR. V. R. R. XXI, pp. 29-33.

12. Durr. N. K. Aryanization of India. Calcutta, 1925. 18. KIRFEL, W.

Das Purāņa Panchalakshaņa. Bonn, 1927. 14. LAW, B. C Rivers of India Calcutta, 1944.

15. Law. B C. Tribes in Ancient India, Poona, 1943. 16. PARGITER, F. E. Ancient Indian Historical Tradition, London,

1922. 17. PARGITER. Dunasties of the Kali Age, London, 1913. F.E.

18. PRADHAN, Chronology of Ancient India. Calcutta, 1927. 8. N.

19. RANGACHARYA, "Pre-Musalman India," vol. II, Part I. Vedic India. Madras, 1937. 20, STEIN, M A. "Indo-Iranian Borderlands." JRAI, LXIV,

179-202. "On Some River Names in the Rigveda." 21. STRIN, M A

JRAS, 1917. pp. 91-9. "The Rigveda and the Punjab" BSOS, 6, 549-22. WOOLNER, A. C. 54.

CHAPTERS XII, XVI, XX and XXIV Language and Literature

(See Histories of Literature under General Bibliography.)

 Arnold, E. V. Vedic Metre. Cambridge, 1905. The Atharvaveda, Strassburg, 1899. 2. BLOOMFIELD,

M. Der Sprachgebrauch der älteren Upanishads. S. FURST. A

Göttingen, 1915.

4. HILLEBRANDT, Ritual-Litteratur. Strassburg, 1897. A.

5. MACDONELL. Vedic Grammar. Strassburg, 1910. A. A.

Stilgeschichte und Chronologie des Rippeda. g Wüst, Walteb. Leipzig, 1928.

BIBLIOGRAPHY

CHAPTERS XVII, XXI, and XXV

Political and Legal Institutions

(For Original Sources see under General Bibliography.)

1. Basu, P. Indo-Aryan Polity. London, 1925.
2. Beni Prasad. Theory of Government in Apple

Beni Prasad. Theory of Government in Ancient India. Allahabad, 1927 (Chs. I, II).

habad, 1927 (Chs. I, II).

B. DIRSHITAE,
V. R. B.
Hindu Administrative Institutions. Madras,
1929.

4. GHOSHAL, U N. A History of Hindu Political Theories. London, 1923 (Chs. I. II).

5. GHOSBAL, U.N. History of Hindu Public Life. Part I. Calcuta, 1945.

6. JAYASWAL, Hindu Polity, Calcutta, 1924.

7 JOLLY, J. Recht und Sitte. Strassburg, 1896. (Eng. trans. by Dr. B. K. Ghosh under the title: Hindu Law and Custom. Calcutta, 1928.)

CHAPTERS XVIII, XXII, and XXVI Religion and Philosophy

(For Original Sources see under General Bibliography.)

1. BARTH, A. The Religions of India, London, 1882.

2. Barua, B. M. A History of Pre-Buddhistic Indian Philosophy. Calcutta, 1921.

3. BERGAIGNE, A La Religion Védique, Paris 1878-83.

4. BLOOMFIELD, The Religion of the Veda. New York, 1908.

 Das Gupta, History of Indian Philosophy. Dr. S. N.

DEUSSEN, P. The System of the Vedanta (Eng. trans.). Chicago, 1912.

7. DEUSSEN, P. Philosophie des Veda, Leipzig, 1894.

8. DEUSSEN, P Die Philosophie der Upanishads. Leipzig, 1899. (Eng. trans Edinburgh, 1919.)

9. HILLEBRANDT, Vedische Mythologie. Breslau, 1891-1902.

10. HOPKINS, The Religions of India. Boston, 1895.

11. Kette, A. B Religion and Philosophy of the Veda and Upanishads. Cambridge, Mass, 1925.

12. MacDonell, Vedic Mythology. Strassburg, 1897.

13. MONIER-WILL Religious Thought and Life in India. London, AMS, M. 1891.

14. OLDENBERG, H Die Religion des Veda. Berlin, 1894.

15. RADHARRISHRAN, History of Indian Philosophy. 2 vols. London Sir S. 1923, 1927.

16. RANADE, R. D. Constructive Survey of the Upanishadic Philosophy. Poona, 1926.

CHAPTERS XIX, XXIII, and XXVII

Social and Economic Conditions

(For Original Sources see	under General Bibliography.)
---------------------------	------------------------------

 AIYANGAB, K. V. 	Ancient	Indian	Economic	Thought.	Benares,
D	1004			-	

2. ALTERAB, A.S. Education in Ancient India (second edn.), Benares, 1944.

8. APTE, V. M. Social and Religious Life in the Grikya Sütras.

Ahmedabad, 1939.
4. Banerjee, S. Hindu Law of Marriage and Stridhana.
Tagore Law Lectures. Calcutta, 1896.

Basu, P. Indo-Aryan Polity. London, 1925.
 Das, S. K. Economic History of Ancient India. Calcutta,

1925.
7. JOLLY, J. Rechte und Sitte. Strassburg. 1896. (English

7. JOLLY, J. Rechte und Sitte. Strassburg, 1896. (English trans. by Dr. B. K. Ghosh under the title Hindu Law and Custom. Calcutta, 1928.)
8. Samaddar, J. N. Economic Condition of Ancient India. Cal-

SAMADDAR, J. N. Economic Condition of Ancient India. Calcutta, 1922.
 SARRAB, S. C. Some Aspects of the Earliest Social History of India. London, 1928.

The Caste-System

1. Baines, A. Ethnography. Strassburg, 1912.

 DUTT, N. K. Origin and Development of Caste in India. Vol. I. London, 1931.

S. GAIT, E. A. "Caste" in ERE, III (1910).

4. KETKAR, S. V. The History of Caste in India. Ithaca, N. Y. 1909: London, 1911.

5. Muir, J. Original Sanskrit Texts, vol. I.

6. OLDENBEEG, H. In ZDMG, LI, pp. 267-90.
7. SENART, E. Les Castes dans l'Inde. Paris, 1896.

8. WEBER, A. Indische Studien, X.

APPENDIX

CHAPTER IX

In the absence of any definite vestiges of a system of fortification in the Indus Valley excavations so far, it was naturally assumed that the Indus Valley civilization was politically and socially far ahead of the contemporary civilizations in the West, and had developed "a democratic bourgeois economy" (ante, p. 170) devoid of citadel rule. Recent excavations in Harappā, however, besides supplying other valuable data, have shown that the Indus Valley civilization had its fortifications and was as militant and centralized as any of its day (Ancient Indua, No. 3, pp. 61 ff).

In the mound towards the West at Harappā, rising 50 feet above the level of the plain, high projecting masses of decayed mud-brick indicate the presence of former defences. Recent digging has shown that a defensive wall with a basal width of 40 feet and a height of upwards of 35 feet, built of mud-bricks, stood on a great rampart 10 to 20 feet high consisting of mud and debris with a mudbrick core. The wall, externally revetted with a facing of baked brick, was reinforced at intervals by rectangular towers or salients representing an elaborate system of enfilade. There were probably two gateways, one on the western side and the other at the northern end, the latter representing the main entrance. The defences fall into three main periods of construction: the original baked brick revetment was rebuilt after a long period of weathering and other damage, and the north-west corner was considerably thickened. This new work was built with complete bricks, unlike the older work which was constructed largely of brickhets During the next period, the north-west corner was reinforced by an additional salient, and two entrances of the western gate system were wholly or partially blocked Finally, roughly-built dwellings, constructed above a layer of debris and associated with the intrusive ceramic of a later period, came to occupy the western terraces.

The cuttings across the defences enable us to trace the origin, development and decline of the Harappā culture. It appears that after a preliminary occupation of the apparently unwalled town, associated with a variant or alien culture, the Harappan people built a citadel with imposing defences. These were reconditioned after a considerable time during the heyday of the Harappa culture, when craftsmanship was at its height. The period of decline is seen in the further reinforcement of the reconstructed fortifications and the blocking of a gateway, indicating that the city was on the defensive Finally, a part of the site, above layers of the debris, was occupied by inhabitants of an alien culture.

The situation of Harappā and Mohenjo-daro, pre-eminent among numerous prehistoric sites between the Arabian Sea and the foot of the Simla Hills, already indicated that the Harappā civilization was of a centralized type similar to those in Sumer and Egypt. In

both, the detached mound on the west is the highest and most imposing in the site, roughly a parallelogram in shape, approximately 400 yards long and 200 yards wide. The mound at Mohenjo-daro is known as the stripa mound and includes such remarkable structures as the Great Bath, Collegiate Building, and the Pillared Hall, which find no parallel elsewhere in these cities. It may reasonably be assumed that the mound was a centre of religious or administrative life on a large scale. The counterpart of this mound at Harappa, almost identical in size and orientation, is not a mere coincidence, and the assemblage, in its close vicinity, of a serried line of barracks or cooly quarters, working platforms and granaries, suggests a centralized and disciplined citadel rule. Whether the government was in the hands of a priestly order, as was often the case in Sumer, or of a ruler of roval standing, it is not yet possible to say.

Dr. Acharya considers Mohenjo-daro, with its irregular shape, to correspond with the Droadak ortress of the Mānasārā's plans (B. C. Law Volume, Part II, p. 281). It is not yet definite whether the fortifications surrounded the entire area of the town or were confined only to the west. In the latter case, the probable reasons may be that the important buildings were grouped on that side and that the villagers feared attacks from the west.

Recent excavations of a cemetery of the Harappa culture present yet another analogy between the cities of the Indus and the Euphrates. The dead were buried in an extended position with their heads towards the north and surrounded by large quantities of pottery of normal Harappan type. Grave-pits were 10 to 15 feet in length, 21 to 10 feet in width, and were dug to a depth of from 2 to 3 feet from the contemporary surface. The grave furniture occasionally included toilet objects, besides pottery and personal ornaments. In some graves were found a few decayed animal bones besides a human skeleton. There was one coffin-burial, at present unique in India, but common at Ur, Kish and other places in Mesopotamia in the third millennium B.C The skeleton, enclosed in a reed shroud, was placed within a wooden coffin, 7 feet long and 2 to 21 feet wide. The presence of a lid is suggested by streaks of sticky black substance running over the toes, and the use of preservatives is inferred from the light green substance found over and around the body. This burial, no doubt, represents the customary mode in Sumer during contemporary and previous epochs; but it is not yet known whether this isolated burial was of an Indian or of a Sumerian merchant in India

It may be mentioned that Dr. Wheeler does not include "postcremation burials" (enter, p 193) as a method of the disposal of the dead in the Indus Valley, "since," according to him, "there is no evidence whatsoever that these have anything to do with human burial" (Ancient India, No. 3, p. 83).

SELECT BIBLIOGRAPHY

SELECT BIBLIOGRAPHY (1946-1948)

1. Barua, B. M. "Indus Script and Tantric Code." B.C. Law

Volume, Part II, pp. 461-7.

2. Babua, B. M.

"Trends in Ancient history." CR., Feb. 1946, pp. 79-93.

Heras, H. Min-Kan. Bombay, 1947.

4. MACKAY, E. Early Indus Civilizations. London, 1948.

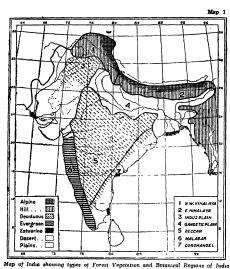
5. Piggort, S. "The Chronology of Prehistoric North-West India." Ancient India, No. 1, pp. 8-26 (A New Prehistoric Ceramic from Baluchis-

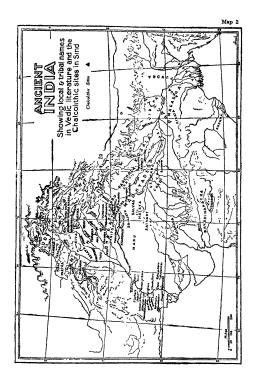
tan" Ancient India, No. 3, pp. 131-142.
7. Pusalker, A. D. "Mohenjo-daro and Rigveda." Bhārata-Kau-

mudi, Part II, pp. 551-63

8. WHERLER,
B. E. M.
9. WHERLER,
HATCHELER,
B. E. M.
10. WHERLER,
B. E. M.
11. A Searliest Civilization: Recent Excavations in the Indus Basin." ILN, Aug. 10, 1946
Harappa, 1946: the Defences and Cemetery
B. E. M.
11. A Telephone India, No. 3, pp 58-130.

10. Wijsekkra,
O. H DE A.
Valley Seal." Kunhan Raja Presentation
Volume, pp 428-41.





Abastanos, 262 Abbevillian tools, 127, 130, 134 'Abd ul-Qādir Budauni, 63 Abhimanyu, 307 Abhipratarin, 324 Abhīras, 308 Abhisara, 306 Absolute, the, 3 Abū, Mount, 82 Abū 'l-Fazl, 63 383: see also Brahman Abū Rīhān, see Alberuni Achauans, 212 Acheulian industries, 127, 129-131, 134 Adam's Bridge, 98 Adam's Bridge, 98 Adhisimakrishna, 273, 308, 324 Adhvaryu, 446, 508 Adul, 126 Adichanallur, 77 Aditı, 190 Adut, 190
Adittanallur, 141
Adityas, 366, 371
Aegean lands, 161
Afghānistān, archaeological sites, 78 plateau, 195 Africa, 105, 130 Agama and nigama, 162 Agastya(s), 292, 319 Aglod, 129 Agnı, 366, 376-7 Agnidh, 508 Agriculture, in Brahmanas, 464-65 in Rigyedic age, 398-9 in Sûtras, 530 proto-Australoids and, 153 Ahichchhatra, 73, 329 Ahımsa, 169 Ahura, 225 Ahura Mazdah, 226, 368 Aihole inscriptions, 54, 272 Aikshväka dynasty, 276, sec also Ikshvaku Aikshvāku(s) 322 Aila dynasty, 276; se also Lunar Dynasty Aındra Mahābhısheka, 314 Am-i-Akbarī, 63 Astareya Brāhmana, 311, 313, 329, 429-31, 435, 439-40, see also Brahmanas Aiyangar, P T S., 162, 165 Aiyangar, S K, 264 Aja, 293 Ajamīdha, 296 Ajanta caves, 66 /rescoes, Negrato elements, 149
Ajas, 249, 251
Ajatasatru, 325, 328, 332, 499
Akbar, 51 Akbar-nāma, 63 Akshāvāpa, 436 Alakanandā, river, 87 Alarka, 290, 297 554

Alberum, 62-3 Alexander the Great, 57, 60, 92 Alexander the Great, 57, 60, 92 Ali Murad, 173, 199 Alinas, 249, 251 Allahbund, 90 Aliuval plains, N. India, 82-4 soils, 108 Alor, 199 Alpines, 144 Alpinoids, 145, 146 Amaravatī stūpa, 76 Amāvasu, 277 Ambāla, 72 Ambarisha Nābhagi, 292 Ambashthas, 262, 283, 306 Amphoxus, 120 Amreli, 75 Amri. 199 culture, 195, 196 Amsumant, 291, 292 Anamitra (father of Sini), 301 Anamitra (Sumitra), 301 Ananda (Brahmā), 274 Anantapur, 188 Anantpur, 132, 134 Anarta, 280 Anava(s), 278, 281-3, 288, 302-4, 311
Eastern, 297
Ancient Monument Preservation Act (1933), 74 Andaman Islands, 144-5, 149 Andamanese, 149 Andhaka, 301 Andhra(s), 102, 266 Anga(s), 260, 266, 283, 288, 297 304. 306, 331-2 Angada, 295 Angami Nagas, 145 Angara, 283 Angirasas, 280, 291 Angkor Thom, 78 Angkor Vat, 78 Anhilpur, 75 Animal-worship, in Indus Valley civili-zation, 187, 191-2 Animals, in Indus Valley civilization, 177 Annem, Indian influence, 78 Ant-eater, scaly, 115 Anu(s), 249, 251, 256, 264, 278, 310 Anukamanīs, 426, 264, 2 Anukamanīs, 478 Anuloma marriage, 515-16 Anurādhapura, 78 Anurvada, 306, 330 Apāchyas, 262 Apah, 366, 376 Apam-napat, 226, 366, 377 Apastamba, 480, 490, 519 Apava Vasishtha, 286 Āpayā, river, 246 Apes, 114 Āprī hymns, 351-2

4 1 . 1 . 1	
Arab historians, 62-3	Attock district, 134
travellers, 61	Australia, 145, 150
Arabia, 216	Australoids, proto-, see Proto-
Arabitai, 161	Australoids
Arachosia, 253	Austric speech-family, 147, 150-6
Arakan Yoma, 92	Austro-Asiatic languages, 150
Āranyakas, 239, 424-5, 451-2	Austronesian languages, 150
Aravally, 186	Austronesians, 145
Aravally, 186 range, 98	Avantı(s), 102, 287, 306, 328-30
Arbitration, 440	Avantipur, 73
Archaeology, Central Department of,	Avesta, 225-6, 337, 364, 369, 391
68, 72	Avikshit, 291
Archer, W.G., 154	Axes, Bronze Age, 139
Archer, W.G., 154 Arcot, 132	hand, 130-2
Arisinna, 51	Ayas, 138, 401
Arjikiyā, rivei, 247	Ayasya, 291
Arjuna, 300, 304, 305 ff	Ayodhyā, 277, 279, 280-2, 286-8, 290-1.
Arjuna Kārtavīrya, 274, 284-5	292-3. 326
Armenia, 209 Armenoids, 144-5	Ayu, 277
Armenoids, 144-5	- · ·
Arrian, 262 Art, in Indus Valley civilization, 184 ff	Babblers, 116
Art, in Indus Valley civilization, 184 ff	Babur, 63, 107
Arthropods, 121	Babylon, 209
Aruni, 519	Bactria, Greek rulers, 57
Aryabhata, 272	Bădarayana, 502
Aryavārta, extent, 317	Bäghelkhand, 98
Aryan invasion, date, 208	Baghmati, river, 92
occupation, stages, 316 ff	Bahadarpur, 130
speech-family, 147	Båhawalpur, archaeological sites, 75
Aryans, and Dasa peoples, 159	Bāhikās, 262
indigenous origin theory, 220-1	Bāhlīka(s), 263, 299
and Indus Valley civilization, 196-7	Bōhu, 288, 290
in Mesopotamia and Syria, 222	Bairat, 75
original home, 206 ff	Bajra, 112
Asamañias, 291	Bālachandra, 51
Asamañjas, 291 Asandivant, 255, 257	Balanoglossus, 120
Ascetics, 498-9	Balarama, 302, 306
Ashtaka, 289	bali 259 427
Asiatic Society of Bengal, 66	balt, 358, 437 Balt, 288, 292
Asiatic Society of London, Royal, 70	Ballala, 49
Asıknî river, see Chenab	Baluchistan, 71, 77, 157, 200
Asita, 288	(West), earthquake, 89
Aśmaka(s), 298, 317, 323, 332	plateau, 92, 95
Aśoka, 52-3, 70, 103	Bamboos, 110
Asramas, 451, 479, 498-9	Banabhatta, 49
Assam, 52, 74, 145	Banaganapah, 85
earthquake, 89	Banerji, P.N., 264
megalithic monuments, 141	Baneiji, R D, 71
Assamese language, 170	Bangarh 74
Assemblies, popular, 356-7, 433, 488	Bàngarh, 74 Banyan, 113
Assyrians, 254	Barabudur, 78
Astıka, 324	Barbets, 116
Asuras 254 318	Barhadratha dynasty, 300, 323 ff
Asuras, 254, 318 Asura-gods, 223, 224-5	Barley, 112
Aśvamedhadatta, 324	Barren Island, 89
Aśvapatı Kekeya, 324, 473	Barth, 153
Aśvatthaman, 304, 307	Basarh, 69
Aśvins, 366, 372-3, 398	Bāshkala recension of Rigveda, 230
Atharvaveda, 153, 229, 336-7, 349-50,	Bath, Great, at Mahenjo-Daro, 176-7,
431, 434	192
contents, 411-9	Batrachians, 118
	Bats, 115
language, 410–11 medicine in, 463	Baudhāyana, 480, 519
religion in 442-4	Beaches, raised, 89
religion in, 442-4	Beads, from Mohenjo-Daro, 188
Atmakur-Dornala pass, 133	Beas, river, 87, 95, 246
Atman, 473-4, 499-502	Beech-argument, 217
Atris, 280-1, 287	Bees, 120
Atthis, 161	
Attirampakam, 133	Begram, 79

***** **	DIC IIGH
Bellary, 132	Boats, in Rgveda, 400
Benaras, 98, 199, 282, 297, 331; sec also	Bodh Gava, 68
Kāši	Boghaz-kui, 209, 224, 226 Bolan Pass, 93
Bengal 95, 102	Bolan Pass, 93
archaeology, 74 Dravidian element, 158	Bombay, palaeological finds, 131
	submerged forest, 90
earthquakes, 89 influence on Burma, 78	province, archaeological sites, 75 Borivli, 131
palaeological finds, 132	Bos primigenius, 85
Bengalı language, 170 Bernihalla, river, 132	Botanical areas, 109
Bernihalla, river, 132	Botanical areas, 109 Boulder Conglomerate, 125-6, 133
Benveniste, Prof., 211 226 227 Bergaigne, 232 Besnagar, 74	Brachycephals, 144, 145 Brahmachārın, 459, 498, 521
Bergaigne, 232	Brahmacharın, 459, 498, 521
Besnagar, 74	Brahmadatta, 298, 326-7, 329, 331-2
Betwa, river, 95 Bhadraśrenya, 282	Brahmagiri, 76, 135, 137
Bhagadatta, 306	Brahman, 378, 444, 448, 473-4 499-501
Bhāgadugha, 435	Brahman (priest), 446 Brahmanas (texts), 229, 238-9
Bhagavad-Gitå, 164	contents, 422-4
Bhagiratha, 292	language, 420-2
Bhagirathi, 95	religion in, 446-51
Bhajamana, 301	social life in, 453 ff
Bhekti, 119	Brahmanas (caste) and Aryan expan-
Bhalandana, 280 Bhalanases, 249, 251, 254	sion in S India, 319
Bhandarkar, 254	ın Brahınanas, 455-6
Bhanrer range, 98	ın Dharmasütras, 488-9 ın Upanıshads, 471
Bharadvāja, 292, 296	in Sutras, 514
Bharata (brother of Rama), 294-5	Brāhmana families, 280-1, 291-2, 298
Bharata (son of Dushyanta), 296	tradition, 309 ff
Bharata of Hastinapura, 274	Brahmaputra river, 95
Bharatas, 249-50, 256, 266	ancestry, 86
Bhārata war, 304 ff date, 272-4	deflections, 90
Pharatavareha 107	source, 93
Ehāratavarsha, 107 Bhāratī Santati, 107	valley, 92
Bhārgavas, 280, 283	Brahmarshi-deśa, 220 Brāhmi script, 53, 59, 67, 194, 395 Brāhui, 157, 197, 206 Brandenstein, W, 210, 215-16 Brandstetter, R, 151
Bharhut, 68	Brahm 157 197 206
Bhattiya, 332	Brandenstein, W. 210, 215-16
Bhavnası, 133	Brandstetter, R. 151
Bhils, 101	
Bhīma, 300, 304 ff.	Brihadāranyaka Upanishad, 315, 434,
Bhīma Satvata, 295, 297	474, 500, 501
Bhīmaratha 297 Bhir mound, 70	Brihadbala, 304, 306, 325
Bhīshma, 298-300, 307	Brihadratha, 300
Bhita, 69	Brihaduktha, 329
Bhoja(s), 287	Brihadvasu, 296 Brihaspati, 366, 377
Bhojaprabandha, 49	British Museum, 76
Bhrigus, 280, 283-4	Bronze, use in Indus Valley civilization,
Bhrimyaśva, 297	188-9
Bhrūna, 494	Brown, J. Coggin, 129
Bhutan, 145	Brunnhofer, 248
Bhutara, 130	Buck, black, 115
Bibhishana, 295 (North), earthquake, 89	Buddhism, 61, 498
palaeological finds, 132	in Afghanistan, 78
Bijapur, 75, 132	in Burma, 77 at Taxila, 70
Bikaner, archaeological sites, 75	Buddhist sites, archaeological, 69
Bikanër, archaeological sites, 75 Bilhana, 49	Madras, 76
Billa Surgam, 85	Buffalo, early, 84
Bimbisara, 327-8, 332	Bühler, 395
Birds, 115-7	Buildings, of Indus Valley civilization,
Black cotton soil, 108	173-6, see also Houses
Block, Dr., 69	Bulbul, 116 Bundelkhand, 98, 102, 131
Bloch, Dr., 69 Bloch, Jules, 151 Blonde hair, 214	Bundi, 129
Bloomfield, 237, 239, 241, 260, 365	Buntings, 116
Bon, 118	Burgess, Dr., 68
15011, 110	

IN	INDEX		
Burtal customs, Irisn and India, 227 Indus Valley, 182 Burais, megolithic, 136 Burkitt, 138 Burnat, srchaeology in, 77 Burnahom, 137, 140 Burar, 199	Chandanā, 33 Chandi Lera- Chandi Sewu Chandrabālā, Chandrabahāgi Chandraguph Chandraleste		
Buzzard, 117 Caland, W., 238	Chandragupt Chandraketu Chandravali, Chanhu-daro, Chaomukh, 1		
Calcutta, 95 earthquake, 89 University, Escavations by, 74 Caldwell, Bushop, 161 Camboda, Gulf of, 97-8 Camboda, 75 Camboda, Camboda, 75 Camboda, 133	Chaomukh, 1 Charpentier, Chārsadda, 6 Chatterjee, 1 Chattagarh 1 Chaulukyas, Chauntra mo		
	Cheetah, 114		
Campignian culture, 135 Canning, Lord, 68 Canoes, 150 Cappadocia, 208-9, 211 Cardamom hills, 96, 97, 102	Chellean too Chenāb, rive Chen-tamizh Chera(s), 10 Chhāndogya		
Carnivora, 114 Carp, 119 Carpentry, in Rigveda, 401 Carts, in Indus Valley civilization, 180	474-5, 50 Chhandas-V Chin Hills, Chinese tra		
in Rigyeda, 402 Caste, in Brahmanas, 453-6 and criminal law 515	Chingleput, Chinkara, 11 Chital, 119 Chitoor, 132		
in Avestas, 391 in Rigveda, 387-90, 400 in Sutras, 513-16 Castes, mixed, 515 Castor oil, 113	Chitral, 146 Chitral, rive		
Catfish, 119 Cattle, 114 in Brāhmanas, 464 early 84	Chitraratha, Chittagong I Chittang, ri Chola, 103, Chola inscr.		
m Rigveda, 398-9 in Sütras, 529-30 Caucasus, 140 Cauvery, river ses Käveri	Chordates, Chota Nago		
Celts, in Asia Minor, 211 neolithic, 137	plateau, S Chousingha Christensen Chūdā-karī		
India, archaeological sites, 74 Central India plateau, 96, 98-9 Provinces, archaeological sites, 73 Centum-satem split, 211	Chunar, 99 Chyavana, Chyavana I Clactonian		
Cereaus, 112 Cerebrais, 337 Ceylon, 98, 162 archaeological sites, 78	Classes, soc zation, 18 Cleanliness. Climate, 16 effects, 16		
Râme in, 295 Chachaima, 51 Chakladar, 247 Chakahusha, 275	Cobra, 118		
Chakahusha, 275 Chalukyas, 59, 103 Chambal, river, 95 Chameleon, 113 Champs, 200, 297 Champs, 78, 297, 325, 332 Cham Bardal, 49	col, 113 Coelenterat Coffee, 113 Combatore Coins, 57-9		
Chand Bardai, 49 Chanda, 280 Chanda, 280 Chanda, Rama Presad, 143 Chanda Pradyota, 328 Chanda Pradyota, 328	Colgong, 9 Collins, Ma Colonies, I Columella		
Chandala speech, 156 Chandalas, 253	Comilla, 74 Communio		

.-Jongnang, 78 1, 78 , 332 , 332 ta river, see Chenab ta Maurya, 104 t, 295 174, 179, 186, 195-6, 199 26 Jarl, 163 99 109 plain, 97 51 dustry, 128-9 2, 288, 300, 306 iols, 131 ols, 131 orer, 87, 95, 246–7 b, 158 02, 261 i Upanushad, 325, 438, 473, 92 vellers, 61-62 132-3 . Brāhmans, 146 er, 93, 146 a, 300 , Yadava, 278 Hills, 145 iver, 246 317 ptions, 54 120 pur, 102 96, 98 1, 115 n, 224 man, 527 Pañchajara, 311, 312 tools, 127, 128, 131 cial, in Indus Valley civili-, 524, 529 08 ee Dress 13, 150 tes, 121 , e Gap, 98 9, 64, 68, 465, 531 98 ark, 163, 167 Indian, 105-6 shell, 188 Communion, in sacrifice, 506

Comorin, Cape, 98 Condiments, 113 Conti, Nicolo de', 64 Coorg, 146 Copper age, 138-40 Coppersmith, Indian, 116 Corals, 121 Cormorant, 117
Coromandel coast, 89, 97
Cosmetics, in Indus Valley civilization, 178-9 in Sütras, 528 Cosmogonic myths, 153 Cosmogony, Vedic, 383 Cotton, 108, 113 Counting system, 167 Cow, cult of, 166, 399, 464, 530 Cowries, 120 Cranes, 117 Creation, 383-4, 449 Crete, 161, 182, 201 Crocodiles, 118 Crops, 111-3, 529 Crows, 115 Crustaceans, 120 Crystalline soils, 108 Ctesias, 60 Cuckoo, 117 Cuddapah, 132, 133 Cuddapah, 132, 133
Cult, proto-Australoid elements, 153-4
Cult-words, Indo Irānuan, 225
Cultivable land, area, 111
Cultivable plants, 111-3
Cultivable plants, 111-3 Cultivation, proto-Australoids and, 151 Culture elements, Dravidsan, 160 ff. Negrito, 149 proto-Australoid, 150-3 proto-Australoid, 150-3 Cultures, language and racial, 147 Cunningham, Gen, Alexander, 68 Cup-marks, 138 Currency, 399, 465, 531 Curzon, Lord, 68 Cutch, earthquake, 89 Ram of, 87-8, 99 submergence, 90 Cybele, 161 Dabar Kot, 199 Dadhivahana, 325, 331-2 Daftars, 65 Dahae, 253 Daityas, 317-8 Daviva-gods, 224-5 Dajı, Dr. Bhau, 68 Dama, 296 Damoh, 131 Dānastutis, 351, 355 ff. Dānastutis, 351, 355 ff.
Dānavas, 317-65
Dancing, 396, 460, 525
Dancing, 398, 460, 525
Dancing, 398, 460, 525
Danube Valley, 140
Dasarājās, 246, 247, 249-50, 274, 311, 312, 314, 330
Dasaratās, 238-4, 287
Dāsas, 159, 253-4, 317, 357-8
Dāsas, 159, 253-4, 317, 357-8 Dasars, 159, 223-4, 317, 357-8 Dasarns, 306 Dasyus, 159, 253-4, 317-8, 357-8 Datta Atreys, 292 Davids, T. W. Rhys, 264 Dayal, 116

Dead, cult of, 504 Debts, 360-1 Debts, 369-1 Deccan, archaeological sites, 75 College Research Institute, 75 colonization of, 317, 319 dramage pattern, 8 plateau, 96-8, 102-3 Deciduous flora, 110 Decimal system, 181 Decimal system, 181
Deer, 115
Delh. 116
Delh. 116
Delh. 116
Delh. 116
Delta, Canages and Indus, 83
Delwad, 129
Demons, in Rigveda, 379
Decopar, 54
Dec Devarāta, see Sunahsepa Devāvrjaha, 301 Devikā, river, 220 Dharma, 434, 511 Dharma-sūtras, 479, 487 ff., 506 Dharshakas, 276 Dharwar district, 132 Dhaulagiri, 91 Dhok Pathan, 128 Dhrishta, 279 Dhrishtadyumna, 298 307 Diritariahtra, 300, 305 Dhritariahtra, 300, 305 Dhruva, 274-5 Dibang, river, 95 Dicang, 436, 461, 525 Dret, of Indus Valley peoples, 177 see also Food Dighâyu, 326 Dighâtu, 326-7 Dihâng, river, 95 Dikshit, Rao Bahadur, 194 Dilîpa II, 293 Dinaric race, 145-6 Dipper, Brown, 117 Dirghatamas, 291-2 Divakara, 325 Divasira, 320
Divasira, 320
Divasira, 320
Divasira, 320, 297, 311
Doib, Ganges-Tunna, 93
Ganges-Junna, 93
Dog, and mesolithic burials, 136
Domestication of animals, 85
Domestication of animals, 85
Draupasit, 308
Drau Divisions of country, in Vedic litera-

Druhyu(s), 249, 251, 256, 278, 282-3, 310, 311, 312 Drummond, 184	Firûz Shâh Tughluq, 53, 66 Fishes, 119-20
Drummond, 134 Drupada, 298, 304, 307, 329	Five Rivers of Punjab, 86-7, 94-5
Dry forests, 110	Flake industries, 126 ff. Flat fish, 119
Ducks, 117	Fhet, 272
Duhsasana, 307 Durdama, 282	Flood, Great, 274, 275-6
Durmukha, 329	Flor, 216
Durvodhana, 304 ff.	Fly-catchers, 116 Flymg fish, 120
Dushtaritu Paumsayana, 433	Food, in Brahmanas, 461-2
Dushyanta, 274, 296 Dust-storms, 127	m Sütras, 525-6
Dvapara age, 298, 316	in Vedic age, 396
Dvaravati, 78	Foote, Bruce, 75, 129, 132-4 Forests, 109-11
Dyumidha, 296, 311	Forts, 359
Dymukha, 329 Dyvátrava-kövya 49	Fortunatov's law, 339
Dyańsaya-kavya, 49 Dyaus, 366, 367	Frankfort, Henri, 195
Dyavaprithivi, 368	Freshwater vegetation, 111 Friedrich, J, 210
Palane 101	Frogs, 118
Eabani, 191 Eagle, 117	Fruits, 113
Earth Mother, 160	Funeral hymns, Vedic, 352-3 Furniture, in Brāhmanas, 467
movements, 89-90 Earthquakes, 88-9 East Indies, 105	Indus Valley, 179
Earthquakes, 88-9	in Upanishads, 500-1
Echnoderms, 121	Future life, in Brähmanas, 449-50
Education, m Brahmanas, 458-60	ın Rıgveda, 384
ın Rıgveda, 394-5	
in Sutras, 519-24	Gabrs, 146
Eggeling, 255, 447 Egypt, 182	Gadawāra, 84 Gadd, Dr., 196
and Indus Valley civilization, 200	Gâdhi, 284, 288-9
Ekachakra, 255	Galataeans, 211 Gambling, 396, see also Dicing
Elam, 182, 194	Gambling, 396, see also Dicing
El-Amarna, 209 Elephant, 114, 221	Game birds, 117 Games, in Indus Valley civilization,
in Indus Valley civilization, 189	179
Elephanta caves, 66	Gana, 355
Eliot, 264	Gandak, river, 87, 92, 95, 255 Gandhara, 283, 306, 311, 313, 324, 332
Elliot and Dowson, 63 Enkidu, 191	Gandharis, 252, 263
Eranvej, 222-3	Gandharva, 226
Eshnunna, 195	Ganesia, 165
Ethics, see Morality Evans, Sir Arthur, 168	Gangā, river, m Rigveda, 246; see also
Everest, Mount, 91	Ganges Ganges, river, 95, 98, 104
Evergreen flora, 109-10	Bhagiratha and, 292
Evil eye, 153	origin, 86-7
Fabri, Dr., 196	reversal of flow, 86 valley, 102
Fa-hien, 61	Bronze Age finds, 138-40
Faience, in Indus Valley, 189 Falcon, 117	Ganjam, 132
Falcon, 117	Gárgī Vāchaknavī, 520
Family, in Brahmanas, 453	Gårgya, 314
in Rigveds, 361, 387 m Sütras, 512 ff. Fatehgarh, 139	Gárgya Báláki, 499 Gariala 126
Fatehgarh, 139	Gariale, 126 Garo hills, 91
Father Gods, 161	Garuda, 166
Fauna, palaeolithic, 127 Fergusson, 68	Gastropods, 120
Fibre crops, 113	Gāthās, 207, 224-7 Gauda, 102
Ficus, cult of, 149	Gaudavaho, 49
Figurines, Indus Valley, 183	Gauri, river, 247
Finnish language, 212	Gauri Sankar, see Everest Gautama, 488, 490, 492
Finno-Ugrian speech family, 155, 157, 216	Gautama, 488, 490, 492 Gayatri, 370, 395
Fire, domestic, 503, 512	Gayatri, 370, 395 Gazelle, 115
sacrificial, 377, 380, 507-8	Geldner, 250, 252, 257, 432

Genealogies, Vedic and Puranic, 310 ff.	Haihaya(s), 278, 282-5, 286-8, 291, 323
Germanic home theory of Indo-Euro- peans, 213-4	329-30 Hair styles, in Indus Valley civiliza-
Chadhara 129	tion, 178, 200
Ghaggar, river, 246 Gharial, 118	in Vedic age, 397
Ghariai, 118 Chatathraha 207	Hakrā, 75 Halakundi, 132
Ghats. Eastern and Western, 96-7	Hall, 212
Ghatotkacha, 307 Ghats, Eastern and Western, 96-7 Ghazi Shah, 199	Hamilton, Dr. Buchanan, 66
Ghāzipur, 199	Hammirā-kāvya, 49
Gibbon, 114 Giddalur, 133	Hammiramada-mardana, 51 Hanuman monkey, 114
Giles, 214	Hanumant, 166-7
Gilgit, 146	Haoma cuit, 227, 378 Harappā, 59, 71-2, 158, 160, 172 ff., 247
river, 94	Harappa, 59, 71-2, 158, 160, 172 ff , 247
Girivraja, 327 Glaciers, Himālayan, 82	see also Indus Valley civilization "Harappa culture," 195-6
Giass, in indus valley civilization, 100	Hardwar, 95
Goats, 115	Harischandra, 274, 289-90
Godána, 528 Godávari river, 84, 97, 102	Hariyamsa, 314
Gods, classification, 365-7	Hariyūpīyā, 247 Haro, river, 125
Dravidian elements, 163 ff.	Harpoons, Bronze Age, 140
Father and Mother, 160	Harsha-charita, 49
Gogra, river, 95 Gold, use in Indus Valley civilization,	Harsha-vardhana, 59, 61
188	Harwan, 72 Haryaśva, 282
Gomal, river, 93, 246-7	Hastin, 296
Gomati, river, 246-7	Hastinapura, 256, 257, 296, 307, 324-5
Gondi, 157 Conetha Brāhmana 311	Hawk, 117
Gopatha Brāhmana, 311 Gordon, Major, 135	Heme-Geldern, 140 Hemachandra, 49
Gorkhali, 170	Hemp. 113
Gotra, 454 Gotze 210 211	Henotheism, 365, 382
Gotze, 210, 211 Graeco-Bactrians, 57	Hepit, 161
Gram, 108, 112	Heras, Rev. H . 158
Grama, 359	Herāt, 93 Herodotus, 60, 161, 227
Gramani, 435, 455, 492-3	Heron, 117
Grebes, 117 Greek language, 212	Herring, 119
Grierson, 264	Hertel, 248
Griffith, 246	Herzfeld, E , 209-10, 222
Grihastha, 498	Hevesy, W, 155 Hill forests, 110
Grihya-sutras, 479-81, 502 ff Ground-nuts, 112 Grouse, sand, 117	Hillebrandt, 223, 231, 251-53
Grouse, sand, 117	Hilsa, 119
Guebres, 146	Hımalayas, 91-95
Guebres, 146 Guha, B S , 144, 147, Gujarāt, 51, 56, 75, 83-4, 88, 99, 146	and earthquakes, 89 Ice Age in 82-3
monolithic culture, 134-6	Hīnayāna Buddhism, in Burma, 77
Northern, 102	Hindu Kush, 91, 93
palaeolithic man, 129-30	Hindustan, Plain of, 94-5
Prehistoric Expedition, First, 129	Hiranyanabha, 327
Gujo, 199 Gulshan-i-Ibrāhīmī, 63	Hirpura, 129, 135 Hirt, 209, 211-2
Gumti, river, 95	Hittite language, 210-1
Gundla Bhrameshvaram, 133	Hittites, 208 ff , 222
Gungeria, 139	Hiuen Tsang, 47-8, 52, 61, 329
Gungeria, 139 Güntert, H., 214 Guntur, 132	Hog, 115
Gupta art, Negrito elements, 149	Homa, 163
Guptas, coins, 58	Hoofed animals, 114 Hooghly, 95
pottery, 73 Gwalior, 99	Hooker, 109
Gwalior, 99 archaeology in, 74	Hooker, 109 Hoopoe, 116
armacoogy m, 14	Hopkins, 248, 251
Hadda, 78	Hornbill, 116 Horse, 114
Hadol, 129	and Indus Valley civilization, 198
· ·	

Hospitality, in Brahmanas, 453	Irulas, 145
in Rigveda, 387 in Sütras, 524	Isila, 76
Hotri, 446, 508	I-tsing, 61
Household implements, Indus Valley, 179	Ivory, use in Indus Valley culture, 189
Houses, in Indus Valley culture, 174-5	Jacana, 117
in Brähmanes, 487	Jackdaw, 115 Jacobābād, 199
in Rigvedic age, 402 in Sūtras, 531	Jacobabad, 199
in Sūtras, 531	Jahnu 282 200
Huna inscriptions, 70	Jahāngīr, 63 Jahnu, 282, 299 Jama-Rājatarangmī, 52
Hunter, Dr., 135, 186 Hunting, in Brahmanas, 466	Jaintia hills, 91
in Rigveda, 401	Jaspur, 129
Husing, 248	archaeological sites, 74-5
Hutton, J H, 143	Jala Jatūkarnya, 489
Huvishkapura, 73	Jamadagni, 274, 281, 284-5, 316 Jamalgarhi, 72
Hyderabad (Deccan), archaeological	Jammu, 125
sites, 177	Jana, 359-60
palaeolithic man, 131 Hyderābād (Sind), 199	Jana, 359-60 Janaka(s), 259, 279, 330-1, 459-60, 473,
Hypergamy, 454, 457, 515	219
riypergamy, 454, 451, 515	Janamejaya, 278 Janamejaya Durbuddhi, 298
	Janamejaya Durbuddhi, 298
Ibis, 117 Ibn Batūta, 64	Janamejaya Parīkshita, 314-5, 324, 330,
Ibn Batūta, 64	332-3 Jānašruti, 457
Ice Age, 81	Jarasandha, 301, 302, 305, 314, 327
Ikshváku(s), 76, 258-60, 276-7, 325-7 Ilá, 276	Jatakas. 156
Immortality, 450	Jātakas, 156 Jaulian, 70
Implements, of Indus Valley culture.	Java, 78
182	Jaxartes, river, 222, 247
Indargarh, 129	Jay, Blue, 116
Indigo, 113	Jayachandra, 264 Jayadhvaja, 287
Indo-China, 78, 105	Jayaunvaja, 201
Indo-Europeans, original home, 206 ff	Jayadratha, 306 Jayasımha, 49, 51
Indo-European speech family, 147, 205	Jha. Ganganath. 220
Indo-Iranians, early traces, 208 ff original home, 222	Jhangar culture, 195-6 Jhelum, river, 87, 92, 95, 246-7 Jhukar, 199
relations, 222-7	Jhelum, river, 87, 92, 95, 246-7
relations, 222-7 Indonesia, 78, 150	Jhukar, 199
Indonesian speech, 151	culture, 195, 196
Indra, 225-6, 353, 367, 373-4	Jonaraja, 51 Jones, Sir William, 66, 205
Indraprastha, 305, 324, 331 Indrota Daivapa Saunaka, 314	Jowar, 108, 112
Indrota Daivapa Saunaka, 314	Jumpa river, 87, 95
Indus, river, 94-5 origin, 86-7	Jumna, river, 87, 95 Jungle fowl, 117
source, 94	Justice, administration of, 360, 433,
Indus valley, 71	Justice, administration of, 360, 433, 437 ff., 493 ff.
Indus Valley culture 71 72 179 #.	Jute, 113
see also Mohenjodaro	Jyotisha-vedānga, 482
authors of, 196-7	
connections, 199-201	Kābul, river, 93, 247
decline, 201	Kadars, 145
extent, 199-200 script, 193-4, 206-7	Kadur, 132 Kagzı, 185
survivals, 200	Kalasa Mount, 94, 95, 255
Industries, in Vedic age, 400-1	Kailasa, Mount, 94, 95, 255 Kaimur range, 98
Inheritance, in Sutras, 496-7	Kaisika, 288, 281
Injra, 126	Kakshasena, 324
Insectivores, 115	Kāla, 444
Insects, 120	Kalarā, 330
Interest rates, 497 Inter-Glacial I, 125	Kalawan, 70 Kalhana, 49-51, 72, 272
Invaders, Indian reaction to, 106-7	Kalı age see Kalıyuga
Invertebrates, 120-1	Kali Sindh, river, 95
ippatam, 133	Kalinga(s), 102, 283, 288, 306, 323, 332
Iran, early, see Indo-Iranians	
Iran, early, see Indo-Iranians plateau of, 91-2	Kaliyuga era, 272-4, 308, 316, 323
Irrigation, in Rigvedic age, 403	Kaliyuga era, 272-4, 308, 316, 323 Kalla, L. D., 220

Kallar, 125-6 Kallur, 139 Kalmāshapāda, 293 Kalnagını, 118 Kalpa-sütras, 478-81 Kalpa-sutras, 478-01 Kāms, 444 Kāmboja(a), 262-4, 318, 332 Kamboji, 258 Kampil, 256, 329 Kāmpila, 256, 329 Kāmpila, 256, 329 Kamsa (Yādava king), 301, 302 Kansas (Yādava king), 327 Vannasas (script, 53 Kanarese script, 53 Kānchanjanghā, 91 Kandāhār, 93 Kandivli, 131 Kangra, earthquake, 89 Kanheri caves, 66 Kanishka, 50, 69 Kaniyampundi, 141 Kannada country, 145-6, 157 Kanyakubja, 276, 278, 281-2, 287-9 Karakoram range, 82, 94 Karāla Janaka, 330 Karāla Janaka, 330 Karandhama, 291 Karandhar, 286 Karatoyā, river, 255 Karjan, river, 130 Karkotaka Nāga, 287 Karkotnagar, 75 Karman, 385, 474, 500 Karna, 303, 306-7 Karnali, river, 87 Karnāta, 102 Karnātak, 75, 132 Kārtavīrya, 284 Kārtusha 189 Karūsha (s), 276, 306 Kāshmir, 49-51, 220 archaeological sates, 72 earthquake, 89 glaciation 82 lateau, 92 Kāśi(s), 258-9, 278, 282, 287, 289-90, 297, 306, 323, 326, 331 Kassites, 209 Kasu, 355 Kasyapa(s), 280, 285, 292 Kathaka Upanishad, 501 Kāthiāwār, 58, 88, 99 Kātmāndu, 92 Katmandu, 92 Katyayana, 317, 422, 478 Kaundinyapura, 261 Kauravas, 299, 304 ff. Kausambi, 73, 256, 258, 324-5 Kaushitakii Upanishad, 501 Kavasha Alikisha, 312, 314 Kaveri, river, 97, 102 Keith, A. B., 210, 236, 248, 308-9, 408, 431, 505 Kekaya(s), 262-3, 283, 306 Ken, river, 95 Kenala, 317 Keáins, 262-3 Khafaje, 178 Kharoshthi script, 53

Khāsī hills, 91, 198 Khatvanga, 293 Khila-suktas, 230 Khirthar mountains, 91, 93 Khunder, river, 133 Khushalgarh, 126 Khyber Pass, 93 Kikatas, 252-3 Kikkuli, 208 Kimpurushas, 280 King crow, 116 Kingfisher, 116 Kings, 355 ff election, 432 in Dharmasútras, 488-9 in later Samhitas, 430-1 succession, 356
Kingship, origin, 429-30
Kiratas, 170, 253, 306, 318
Kirghiz steppe, 215
Kirtikaumudi, 51
Kish, 178, 182, 138 Kıstna, river, sec Krishna Kıte, 117 Kittel, 167 Knowledge, 501 Koel, 117 Kohi Sultan, 89 Kohtras, 173 Kolar, 188 Kolhapür, 75 Kols, 101, 160 speech, 147, 151-6 type, 150 Kondāpur, 75 Konkan, 97, 132 Konow, Sten, 254 Kora, 117 Kortalaiyar valley, 133 Kosala(s), 102, 258-9, 286, 237, 294, 396 317, 325-6, 331 Kosaladevi, 327 Kosam, 256, 325 Kosi, river, 87, 92, 95 Kot. 129 Kotivarsha, 74 Kotla Nihang Khan, 199 Krait, 118 Kratha (Bhīma), 288, 297 Kratus, 280 Krauncha, 255 Krimi, 283 Krimia, 283 Krima, 204, 307 Krisanu, 228 Krishna, 165, 301-3, 316, 320 Krishnä, 133 river, 97, 102, 133 river, valley, 76 Krishnaruran, 138 Krishnapuram, 133 Krishnaswamı, V.D., 133 Krita age, 316 Kritakshana, 330 Kritavarma, 301, 306 Kritavarman, 306-7 Kritavirya, 284, 286 Kriti, 330 Krivis, 257 Kroshtri, 278

Krumu, river, 246-7 Kahatriya tradition, 369 ff Kshatriyes, annihilation by Rama, 285. and colonization, 318-9 in Brāhmanas, 455, 514 in Upanishads, 472-3 Kshemaka Rakshāsa, 282 Kshemaka of Kausāmbī, 325 Kahudraka, 306 Kubha, river, 247-8 Kui, 157 Kukura, 302 Kula, 359, 453 Kuliana, 131 Kulli, 199 Kumaon, glaciation in, 82 Kumārapāla, 49, 51 Kumārapāla-charita, 49 Kunar, river, 146 Kundikeras, 287 Kundma, 261 Kunti, 300, 301 Kuntis, 266 Kurnool, 133, 134 caves, 85 caves, 30 Kurrom, river, 93, 246-7 Kuru(s), 250, 257, 266, 299, 307, 314-5, 325 ft., 439 Kurujangala, 259 Kurujangala, 259 Kusa, 255, 300, 304 Kusa, 255, 300, 304 Kusakhvaja, 295 Kushānas, coms, 58 pottery, 72 Kuśika, 288 Kusinagara, 69 Kuvalasva, 279 Lac insects, 121 Ladakh, glaciation, 82 Lakshmans, 294-5 Land-grants, 54, 440 Land ownership, 361, 438-40 Langhnaj, 75, 135, 137 Langur, 114 Lark, 116 Lassen, 248, 261 Lata, 102 Laterite, 85-6, 108 Lauhitya, river, 95 Lava, 295 Lavana, 297 Law, Dr., 279, 326 Law, in Dharmasutras, 487 ff. Law, in Dharmasütras, 487 ff.
Legends, pre-Aryan, 188
Lemurs, 114
Leopard, 114
Leopard, 114
Leopard, 114
Leopard, 116
Leopard, 116
Leopard, 117
Leopard, 118
Livis, 185, 191
Linga, 185, 191
Linga, 185, 191
Linga, 186, 191
Linga, 198, 198
Linga, 198, 198
Linga, 198
Linga

Locusts, 120 Lohumjo-daro, 199 Lomapáda, 288, 294, 297 Loris, 114 Ludwig, 246, 247, 249, 252, 356, 407 Luhit, river, Lunar dynasty, 277-8, 282-3, 288-90, 296-8, 310 Lushai hills, 92 Luvian, 210 Lycians, 161 Ma, 161 McCyndle, J. W, 61 McCynell, A. A., 310, 371 Mackay, E. J. H, 176, 181-2, 196, 198 Mackerel, 119 Madhu, 293, 297, 462 Madhupur jungle, 90 Madhyadesa, 73 Madra, 306 Madrakas, 283 Madras (tribe), 262 Madras presidency, archaeological sites, 76 palaeological finds, 132 Madri, 300 Madura, 132 Magadha, 102, 300, 306, 317, 323, 327-8, 332 Magadhas, 259, 266 Magic, in Atharvaveda, 442-3 in sacrifice ritual, 504 ff., 509-10 Magpies, 116 Mahābhārata. habharata, 48, 168, 272-3, 277, 285, 304 ff., 310 ff., 324-5 war, 201 Mahādeo hills, 96, 135 Mahākosala, 325-7 Mahāmanas, 282 Mahāmadī river, 97 Mahāpadma Nanda, 273, 329 Mahārāshṭra, 75, 102 Mahāsthāna, 74 Mahāsthāna, 74 Mahāvrata, 447 Mahāvrishas, 262-3 Mahāyāna Buddhism in Burma, 78 Mahi, river, 99 Mahishmant, 282 Māhishmatī, 282, 286, 306 Mahmūd of Ghaznī, 62 Maikāl range, 96, 98 Mamāka, 255 Mainametı hıli, 74 Maithilas, 323, 331 Maitrāyānīya Upanishad, 501 Maitreya Soma, 311 Martri, 169 Marze, 112 Majumdar, N. G., 173, 199 Makhad, 126 Makran coast, 93 Maiabar, 146 coast, 89, 97 Malakpur, 125 Malaprabhā river, 132 Mālava(s), 58, 75, 103, 306 Malay Peninsula, Indian influences, 78

Mesolithic man, remains, 134-5 ff.
Mesopotamia, 134, 136-5 ff.
Meyer, Eduard, 299-11, 222, 254
Meyer, Eduard, 299-11, 222, 254
Microlitha, 134
Microlitha, 134
Microlitha, 134
Microlitha, 136
Milk products, 461
Milk products, Malaya, 105 Negritos in, 148-9 Malayalam country, 145 Mālinī, 288 Mallika, 327 Mālwā plateau, 98, 102 Mammals, 114-5 migrations of, 85
Manaar, Gulf of, 98
Mänass Sarovara, 25
Mänass Sarovara, 25
Mänassarovara, lake, 94
Mänandsat, 27-46, 279, 281–3, 311
Mänandsat, 27-46, 279, 281–3, 311
Mänapo-bird, 116
Mänago-bird, 116
Mänapo-bird, 116
Mänango-bird, 117
Mänandsat, 174
Mänands migrations of, 85 great, 108 Mīmāmsā philosophy, 231 Minhāj-ud-dīn, 63 Mirpur Khās, 72 Mitpur Loss, 16 Mitanii, 208 Mithiä, 279, 331 Mitra, Dr. Rajendra Lal, 68 Mitra (Mithra), 225, 386, 370 Mitra rulers (Panchala), 58 Mitrasaha, 293 Manu Raivata, 274 Mitrayu, 311 Mlechchhas, 265, 318 Manu Svärochisha, 274 Manu Svaroenisna, 274
Manu Svayambhuva, 274
Manu Tāmasa, 274
Manu Uttama, 274
Manu Varvasvata, 273-4, 275-6
Maon culture, 213
Marāthās, 102, 106 Mohenjo-daro, 59, 71, 137, 158, 160, 165, 172 ff age of culture, 195-6 arts and crafts, 183-9 buildings, 173-5 economic life, 182 Marichis, 280 funerary customs, 192-3 Marriage, in Brahmanas, 456-8 in Rigveda, 392-4 in Sutras, 516-9 ff. population, 175 religion, 189-92 social life, 175-83 Marshall, Sir John, 69, 71, 74, 197-8, 207 Mohra Moradu, 70 Martand, 73 Moller, 216 Molluses, 120 Monarchy, 355-6, 389 Moneylending, 465, 497 Mongoloids, 144-5, 170 Marudyridha, river, 247 Marus, 256 Marusthala, 256 Maruts, 373-5 Marutta, 291, 296 Maruwardwan, river, 247 Monism, 382 Monitor lizard, 118 Maskı, 76 Monkey-god, 166 Monkeys, 114 Mon-Khmers, 150 Al Mas'ūdı, 61 Mātariśvan, 366 Mathurā, 73, 311, 329 speech, 151 Matsya(s), 258, 307, 311-2 Mattiuaza, 208 Monotheism, 382, 448 Monsoon forests, 110 Maurya empire, 103 Māyā, 353, 384, 500 Maynā, 115-6 Mayurbhanj, 131 Moorhen, 117 Mooring, 11 Morality, in Brähmanas, 449 in Sütras, 510, 524 Mother Goddess, 180 in Indus Valley culture, 189-90, 198 Motichandra, 284 Measurement Systems, Indus Valley, 181 Media, 210 Mountain forests, 110 Medicine, in Brahmanas, 463 Mouse-deer, 115 Müchipas, 265 Muchukunda, 282 in Indus Valley culture, 181 in Sütras, 528 in Vedic age, 398 Muchukunda, 282 Mud Skippers, 120 Mudgala, 297, 311-3 Muhammad Qāsim Firishta, 63 Muhammad Tughluq, 64 Muir, J., 248, 391 Mūjavant, 245, 263 hills, 221 Zeul Tugšrale, 75 Mediterranean race, 144-6, 157 ff Megalithic burnals, S. India, 77 remains, 141 Megasthenes, 60 Meghná, river, 96 Mehatnů, river, 247 Mehi, 199 Mul Dwārakā, 75 Mulā Pass, 93 Mulāka, 293 Mulaka, 293 Müllet, F. Max, 205, 213, 247-8, 479 Mullet, 119 Mehr, 189 Mekran, submergence, 90 Melanesians, 144, 150 Menhira, 165 Merutunga, 51

INDEX Multan, 220 Multin, 220
Mupda speech-family, 147, 151-5
Mupdas, 147, 150
Mungi, 131
Munia, 118
Muntakhab-ut-Tawarikh, 63
Murshidabad, 98
Murshidabad, 98
Murshidabad, 98
Murshidabad, 98
Murshida, 285
Mushika, 285
Mushika, 285
Mushika, 285 Nichyas, 262 Nicobarese, 150 Nidaghatta, 132 Nidagnatta, 152 Nightyar, 116 Nila, 50, 296, 306 Nilapurana, 50 Nile Valley, 130 Nilgai, 115 Nilgaras, 82, 96, 98, 102 Nimi, 279-80 Music, in Brāhmaņas, 460 in Sūtras, 525 Nımsar, 256 in Sucras, 323 in Vedic age, 395 Musk-deer, 115 Mustard, 112 Mutbas, 265, 266, 318 Nimsar, 200 Nimiyur, 132 Nirukta-Vedanga, 482 Nishada(s), 156, 159, 282, 265-6, 306, 317 Nishadhas, 282 Nisha, 397, 399, 465 Nizam-ud-din Ahmad, 63 Mycenaean artifacts, 168 Greece, 212 Mysore, archaeological sites, 76 Nordics, 144-6, 215 North-West Frontier Province, plateau, 97 Myths, pre-Aryan, 168-9 proto-Australoids and, 154 archaeological sites, 72 Nriga, 283 Nushki desert, 89 m Rigyeda, 364 Nyamtı, 132 Nābhāgas, 276 Nābhāgodishta, 276 Nābhānedishtha, 276, 279, 439 Occupations, in Brahmanas, 466-7 in Rigveda, 400-1 Ocean, in Brahmanas, 465 Nachiketas, 475, 501 in post-Rigvedic period, 255 in Rigveda, 248, 400 Officers, royal, 360, 435-6, 491 Oil seeds, 112 Nāgā hills, 91 worship, 192 Nagar, 75 Nagar, 75 Magaryumkonda, 76 Nagas, 144-5, 148, 282, 291, 318, 324, 332 Nagasahvaya, 256 Nahusha, 277-8, 310 Naimsha forest, 256 Natusha, 200, 204 Oldenberg, H., 210, 232, 236, 250, 260 Oostapalli, 133 Opum poppy, 113 Optimism, in Rigveda, 386 Oraons, 147, 154, 157 Ordeals, 360, 438, 440 Oriole, Golden, 116 Orissa, 74 Nakula, 300, 304 Nālandā, 70 Names, brought from Irān, 223 Nanda Devi, 91 palaeolithic man, 131 Nandas, 323 paraeonunic man, 131 Orissa hills, 97, 102 Ornaments, in Brahmanas, 463 in Indus Valley culture, 178 in Vedic age, 397 Orsang, river, 84, 130 Owis, 117 Nandikanama pass, 133 Nandu, 119
Nandur Madhmeshwar, 131
Nanga Parbat, 91
Nārikavacha, 238
Naruhyanta (son of Manu), 276
Narishyanta (son of Marutta), 296 Oxus, river, 222, 248 Ovsters, 120 Narmadā, river, 75, 84, 96, 98, 99, 99, 255, 281; valley, palaeolithic man in, 128 Padam-Pawaya, 74 Padas, 338 Narsinghpur, 130 Nesatyas, 226 Nava, 283 Padmä, river, 95 Padmagupta, 4 Padmävati, 74 Navaráshtra, 283 Navasáhasánks-charita, Năvasăhasinku-charita, 48 Navigation, în Rigweda, 248 Nayachandra, 49 Nayachandra, 40 Nayachan Pagan, 77 Pāhārpur, 74 Pahlavas, 318 Paithan, 75 Paka offerings, 504 Pakthas, 249, 251 Palaeolithic man, remains, 84, 125 ff. Palaco-Mediterraneans, 144-5 Pālas, 59 Palayana, 145 Pälghat gap, 98 Palk Strait, 98 Palms, 110 Paloncha, 131 Newars, 170 Nichakshu, 325 Pamirs, 91, 209-10, 2 Panchajanah, 251, 359

Pafichajanas, 310 Pafichaja(s), 58, 150-1, 257, 266, 297-8, 306, 311, 323, 329, 431 origm of name, 297 Panchamarhi, 135 Panchamarthi, 135
Panchamard, see Five Rivera
Pañchavináse Bráhmana, 321
Pándavas, 300, 304
Pándavas, 300, 308
Pándya, 192, 317
Pangolin, 115,
Pangolin, 115,
Pangolin, 115,
Pangolin, 115,
Pangolin, 115,
Pangolin, 127, 409, 420-2, 481-2, 530-1
Pangolin, 232-3
Pangolin, 232-3
Pangolin, 232-3 Panjkora, river, 146
Panjkora, river, 146
Pantheism, in Upanishada, 502
Panther, 114
Păradas, 318 Păradas, 318 Parafisya, 279 Părasith, 22 Parasith, 22 Paraticina, 274, 284-6, 289, 283, 316 Paraticina, 274, 289, 281, 316 Paraticin, 273, 279, 309, 311, 313, 315 Parichatră, 255, 329 Parliapur, 27 Parliapur, 27 Parliapur, 28, 308, 315, 323-4, 419 Paraticina, 441 Parishad, 489
Parishtas, 481
Parjanya, 366, 376
hymns to, 348
Parnakas, 253
Parrots, 116
Parsus, 146
Parsus, 146 Parsus, 252 Parthians, coins, 58 Partridge, 117 Parushni, river, see Ravi Pastimes, Indus Valley culture, 180 Pațaliputra, 69, 199, 328 Pățhiputra, 69, 199, 328 Pătan, 75 Patanțiali, 214, 237, 258, 410, 482 Pateron, T. T., 133 Patico inlis, 91 Patan, sec Pățaliputra Pauraves, 278, 281-2, 299-301, 323-5 Peafowl, 117 Peari fabling, 120 Pear, 112 Pebble tools, 126 ff. Pedhamli, 129 Pegu, 77 Pelican, 117 Penka, 205, 206, 213 Perch, 119 Periano Ghundal, 199 Peripatus, 121 Periplus of the Erythraean Sea, 60 Personification, 364, 379 Personbair, 141 Perungulam, 141 Peshāwar, 98 museum, 72 museum, 72 Phallie worship, in Indus Valley culture, 191 Philippines, 16 Philosphy, in Atharvaveds, 443-4 in Upanishads, 473-4 Phonestos, 337 ff., 477-8 Phudera, 13

Pigeons, 117 Piggott, Stuart, 139, 140 Pig-sticking, 115 Pigavana, 312 Pilgrim, 85 Pillars, Ašokan, 52-3, 66-7 Pingala, 482 Pingala, 482
Pingala, 482
Pipal tree, 113, 190, 192
Piprahwa relic, 172
Pir Panjel range, 126
Pišačhas, 254, 280
Plaksha Prāsravana, 255
Plantation crops, 113
Plants, flowering, 109
Plateau, Indian, 96-9
Playtocara residu. Pleistocene period, 81 ff Pliny, 61 Pochard, 117 Pokorny, 214 Polo, Marco, 64 Polonnaruwa, Polygamy, 393, Polynesians, 150 Pomfret, 119 Pondicherry, peat deposits, 89 Potali, 331 Pottery, classification, 73 Indus Valley culture, 186 introduction, 150 Potwar, river, 87, 127 Prabhākara, 281 Prabandha-Chintāmani, 51 Prabandha-kośā, 51 Prāchīnagarbha, 275 Pradhan, Dr. 312 Pradyota, 328, 330 Pradyota Mähäsena, 325 Prägiyotisha, 306 Prajapeti, 430, 433, 443, 447, 449, 451, Praiya Bhatta, 51 Pramati, 296 Prana, 444, 499-500 Prasad, Beni, 430 Prasastis, 54 Prasenajit, 328-7 Pratardana, 289 Pratihāra dynasty, 54, 59 Pratikas, 231 Pratikas, 231 Pratipa, 299 Prātisakhyas, 477 Pratishihāna, 75, 277, 278 Pratyagraha, 300 Pravāhana, 473 Pravāhana Jaivāli, 324 Prayag, 87 Pre-Soan industry, 126 Prey, Birds of, 117 Priests, sacrificial, in Sütras, 507-8 ff. Priests, sacrificial, in Sitras, 5 Primitive tribes, surviving, 101 Prinaep, James, 53, 66-8 Prishatha, 276 Prishata, 286-300 Prithi-Vainya, 464 Prithivi, 190, 368, 368, 379 Prithu (Manu), 275 Prithus, 252 Prithvīrāja-charita, 49 Prithvīrājā-vijaya, 49

DIDEX

Rājputāna, 64, 98, 102 archaeological sites, 75

Priyavrata, 274 Prome, 77 Property, law of, 438-9, 497 Proto-Australoids, 144-5, 149-56 Proto-Egyptians, 136 Protozos, 121 ravizzes, 121
Provinces, botanical, 109
Przyluski, J., 151, 155-6, 165
Ptolemy, 61
Puja, 163
Pulahas, 280
Pulakesin II, 54 Pulastyas, 280 Pulika, 327 Pulindas, 265, 266, 317-8 Pulses, 112 Punch, 125 Pundra(s), 266, 283, 288 Pundravardhana, 74 Punishments, 360, 437-8, 479, 494-5 and caste, 515 Punjab, archaeology in, 71 early man in, 125 ff microlithic culture, 135 plain, 95, 98 province, 102 rivers, 86-7, 94-5 Pur, 359, 402 Puranas, 48-9, 154, 168, 271 ff historicity, 308 ff Purohita, 357, 435-7, 456, 488-9, 508 Puros, 265 Pūru, 278, 310-1 rusu, 218, 319-1 Purukutsa, 250, 281, 311, 312 Pururavas, 276, 277, 320, 349 Purus, 249-50, 256 Purusha, 384, 388 Pūshan, 366, 370, 402 Pushkalávati, 69 Pushkara, 295 Python, 118 Pyu. 78 Quail, 117

Quartzite implements, 125 ff.

Race, and language, 205-6 classification of Indian peoples, 143 ff. Racial types, Mohenjo-daro, 176 Racing, 396, 461 Raghu, 293 Rahula, 326 Raikva, 473 Rainfall, 108 Rairh, 75 Rajagriha, 71, 327, 328, 332 Rajaputra, 432 Rajja-poven, Tasa Rajja-sas Rajja-skharra, 51 Rajja-skharra, 51 Rajja-skra sacrifice, 430-1, 434-7, 447 Rajja-skra Chola, 104 Rajja-skra Chola, 104 Rajja-skra Ghola, 104 Rajja-Rājgir, 69, 71, 327 Rājmahāi hills, 98 Rājmahāi Hill tribes, 145 Rajput chronicles, 63

megalithic monuments, 140 megantnie monuments, 140 palaeolithic man, 129 desert, 87, 93 Răjputs, 102, 106 Rakshass, 254 Rāltukass, 294, 317, 319 Rāllukāgu, 123 Rāms, 274, 294-5, 298, 316, 319 legend, 168 Parasurama, 284-5 Rāma-charita, 49 Ramapala, 49 Rămăyana, 49, 114, 272, 285, 294 Ranchi, 140 Ranhā, river, 222 Rape, 112 Rāpti, river 255 Rāsa, river, 247 Rāshtrakūtas, 59 Rās-Mālā, 51 Rāthītaras, 276 Ratnins, 436 Rāvana, 286-7, 295 Rāvi, river, 87, 95, 247, 311-2 Rawalpindi district, 125 Rayachoti, 132 Raychaudhuri, H. C. 264, 314, 327, 330 Res. 141 Rebirth, doctrine of, 385-6 Red hair, 214 Regions, geographical, 100 ff Regur soil, 108 Religion, Dravidian influence, 163-8 Indo-Iranian, 223 in Indus Valley culture, 189-92 Vedic, 162-3 Renou, 226 Reptiles, 118 Republics, 355 Revá, river, 255 Revottaras, 255 Rewah, 131 Rhinoceros. Rice, 112, 153, 221 Richika, 284, 289 Ricolka, 284, 289 Riyevda, 159, 165, 166, 190-1, 197, 207-8. 221, 223, 229-34, 316, 355 ff. 430 ff. classification of hymns, 344 ff. geographical names, 245-8 nistorical value, 309-10 ff. language, 337 ff. place of composition, 248 tribes in, 249-54 Rijrasva, 387 Riksha, 296 Ripuñjaya, 327, 328 Rishis, 319 Risley, Sir Herbert, 143 Risley, Sir Herbert, 143
Rita, 369, 382, 385
Ritual, Aryan and Dravidian, 163-4
Ritudhvaja, see Vatsa
Rituparna, 293
River worship, 192 Rivers, in post-Rigvedic period, 255 in Vedic texts, 245-8 of North Indian plains, 83 of North India, changes in, 86-7

THE VE	DIC AGE
Robin, 116	Sandilya, 239
Rodents, 115 Rohita, 290	Sandilya, 239 Sannati, 297
Rohita, 290	Sanskrit, 107, 144, 205-6
Rohtas, 99	of Sūtras, 484-5 of Upanishads, 483-4
Rokytno swamps, 215 Roller, 116	Vedic 337 #
Rome, contacts with, 75, 76	Vedic, 337 ff. Santāls, 160
Roodrag 133	Santanu, 299, 491
Root crops, 113 Roppa, 135 Roth, 246-7, 252, 260, 263	Sapta-Sindhu, 220
Roppa, 135	Saptasindhavah, 247-8 Sarasval, river, 75, 87, 246, 247, 255; 266
Roth, 246-7, 252, 260, 263	Saraswati, 95
Rubber, 113 Rudra, 165, 207, 366, 367, 376, 443, 447-8	Saravu, river, 246
Rupa, 353	Sarayu, river, 246 Sarju, river, 246
Rupar, 72 Russia, South, as home of Indo- Europeans, 214, 216	Sarsuti, river 246
Russia, South, as home of Indo-	Sarnath, 60, 68, 69
Europeans, 214, 216	Sarpasatra, 324, 332-3
C-l per	Sarsutt, river 246 Sārnāth, 60, 68, 69 Sarpasatra, 324, 332-3 Sāryātas, 276, 278-80, 287 Saryāta, 276, 280
Sabarae, 265 Sabaras, 265, 266, 318 Sabarmatt, 132 river, 84, 99	
Sabarmati. 132	Sassetti, Filippo, 205 Sastri, Banerji, 254
river. 84, 99	Sastri, Banerji, 254
Valley, 75, 129	Satanika, 324-5, 330, 332-3
Sabha, 356-7, 433, 488	Satapatha Brahmana, 313, 317, 430-4, 436, 440, 473, 501; see also
Sacrifice, in Rigveda, 380-1 in Samaveda and Yajurveda, 445-6	Brāhmanas
m Samaveda and rajurveda, 445~6 m Sūtras, 503	Sātavāhana persod, 75, 76
Sadānīrā, river, 255	Sātavahānas, 58
Sadiya, 95	Satem-centum split, 211
Safed Koh mountains, 91	Sati, 393, 458, 518
Sagara, 283, 288, 290-1, 316	Sătpură mountains, 96 Satrăjit, 301
of Ayodhya, 274 Sagileru, river, 133	Satrughna 294-5
Sahadeva, 298, 300-1, 304-7, 311, 327	Sattras, 507
Sahasrant, 278	Satvants, 261, 266
Sähet Mähet, 69, 326	Satyakāma Jābala, 473, 519
Sahr-1-Bahiol, 72	Sātyakı, 306-7 Satyavatī, 284, 289
St Martin, 246	Satyavata, 284, 289 Satyavrata-Triśanku, 290
Sākala recension of Rigveda, 230-1 Sākalya, 231	Saudyumnas, 276, 283
Sakas, 58, 276, 318	Saudyumnı, see Yuvanāśva II
Sāketā, 326	Saugor, 131
Sakti, 289	Saunaka, 478
Sakuni, 306-7	Sauras, 265
Sakuntalā, 289 Šākya, 326	Sauvīras, 283 Savaralu, 265
Salamander, 119	Savaris, 265
Sālmali, 113	Savitri, 365-6, 379
Salsette Island, 131	Scandinavia, 213
Salt, 221	Schleicher, 212
Sálva(s), 258, 306	Schmidt, W., 150, 155, 212 Schools, Vedic, 460
Salya, 306-7 Samans, 503	Schrader, 217
Samaveda, 229, 234-5, 460 language, 407-8	Schröder, F. R., 214, 408-9
language, 407-8	Script, Indus Valley, 193-4
religion in, 445-6	Scythians, coins, 58
Sambhar, 75	Sea, see Ocean
Samgrahitri, 436	Sea squirt, 120
Samhitā, 221 Smhitās, see Vedas, Atharvaveda,	Seals, from Mohenjo-daro, 59, 158, 183, 186-8
Rigveda, Samaveda, Yajurveda	Seaports, 104
Semiti, 357-8, 433, 488	Segmented animals, 121
Samnyasın, 498	Seleucus, 60
Samrāt, 356	Semasiology, 215
Samsara, 451	Semite languages, 216
Samudra-gupta, 54, 104	Senajit, 325, 327
Samvarana, 299, 311-3 Sanchi, 68, 69, 74	Senānī, 359-60, 435-6 Sesamum, 112
inscriptions, 67	Shadahradvana, 72
56	

Shāhābād pass, 99	Someśvara, 51
Shahi Tump, 199	Son, river, 95
Shama, 116 Shama-i-Siraj 'Afif, 63	Spices, 113
Shams-1-Siraj Ant, 68	Spirantization, 337
Shark, 119	Sponges, 121 Spoonbill, 117
Shillong 92	Spooner, Dr., 69
Shell, use in Indus Valley culture, 189 Shillong, 92 Shubbiluliuma, 208	Sráddha, 449
Siam, 78	Sråddhakalpas, 479
Sibi(s), 258, 283, 306	Srauta, 446
Sibipura, 258	Srauta-sūtras, 229, 239-40, 478-81.
Siddhārtha, 326	
Side-acraper, 127 Sigrus, 249, 251	Śrāvasta, 279 Śrāvastī, 69, 73, 279, 326
Sigrus, 249, 251	Sravasti, 69, 73, 279, 326
Sikhandin, 307	Srī, Dravidian element, 164-5 Sri-Parvata, 76
Sikhs, 106 Sikra, 117	Srivara, 51
Sikkim, 145	Śri-Vijaya kingdom, 78
Sikkim, 145 Sikshā, 477-8	Srifijaya(s), 250, 257, 311-2, 433
Sil, river, 128	Śritayu, 306
Śriajit, 181	State, in Dharmasütras, 488
Silk, 527	State papers, 65
Silver, use in Indus Valley culture, 188	Statuary, Indus Valley, 184 Steatite, 186
Smyus, 253 Sind, 51, 62, 71, 95, 102	Steature, 186
archaeological sites, 71	Stein, Sir Aurel, 69, 72, 75, 77, 199, 200, 247
and Indus Valley culture, 199	Sthapati, 436, 493
Sındhu, river, 246-7	Stork, 117
Smdhu-Sauvīra, 306	Strı-achara, 167
Sindree, 90	Students, Vedic life, 520-3
Singhbhum, 139	Suari, 265
Sino-Tibetan speech family, 147, 170	Subahu, 295, 297 Sucker fish, 119
Sīradhvaja, 295 Sirkap, 70	Sucker nan, 119
Sirkap, 10 Sirinaga 328	Sudakshina, 306 Sudas, 249, 293, 310, 355 Sudas Pajavana, 311-2
Sisunaga, 328 Sisupala, 305	Sudas, Pariavana 311-2
Sita, 294-5	Sudása, 293, 299, 211-3
Siva, 448	Suddhodana, 326
cult of, 161, 165	Sudeva, 282
Dravidian elements, 163-6	Sudhanvan, 295, 299
in Indus Valley culture, 191, 197, 201,	Sudras, 390, 454-5
207 Waterije 194	m Sūtras, 513-4
Natarāja, 184	Sugar-cane, 112 Sugriva, 295
Sivapura, 258 Sivas, 249, 251, 311	Suhma, 283, 288
Sivis, 311	Suka, 51
Siwalik age, 85	Sukrita-kīrti-kallolmī, 51
hills, 125	Sukrita-samkirtana, 51
river, 86-7	Sulasmān, 61
Skarda, 94	mountains, 91
Sky Father, 160	Sulva-sútras, 480
Slavery, 358, 402	Sumati, 296 Sumer, Indus Valley culture and, 182,
Smarta, 446 Smith, 264 Smalla, 120	186, 194, 200
Snails, 120	Sumerian language, 155
Snake bird, 117	Sumerians, and Indus Valley culture.
Snakes, 118	197
Snātaka, 522-3	Sunahsepa, 289, 453, 490, 512
Snipe, 117	Sunda volcano chain, 89
Soan river 87	Sunderbans, 111
industries, 128-8, 130	Sunga pottery, 73
valley, 72, 82, 84	Sur Jangal, 199 Sura, 287
Soil, varieties, 108	Sura 397, 462, 526
Solar dynasty, 278-9, 281-2, 290-1, 304; see also Aikshvāka, Ikahvāku	Sūrasena(s), 287, 306, 311, 323, 329
Soma, 221, 225, 366, 367, 378, 396, 462	Suräshtra, 102
Somadatta-Sudāsa, 297, 311	Suratha, 299
Somadhi, 327	Surma valley, 92
Somačni, 327 Somača, 298, 311	Sürpāraka, 287, 316

Sūrya, 366, 370 Susa, 180, 182 Susarmā, 306 Susartu, river, 247 Susarda, river, 247 Sushoma, river, 247 Süta, 435 Sütas, 271, 309 Sutlej, river, 87, 95, 246 Sütras, 229, 239-41, 476 ff. language of, 484-5 religion in, 502 ff. Sutudri, river, see Sutlei Suvarnaguri, 103 Suvāstu, rīver, 247 Suvrata, 283 Svastika, in Indus Valley culture, 186, 192 śvetaketu (son of Uddālaka), 330 śvetaketu Āruņeya, 519 śvetakvatara Upanishad, 500 Svetya, river, 247 Swallow, 116 Swat, river, 93, 146, 247 Swift, 116 Swords, Bronze Age, 139 Sylhet, 90 Syria, 209 Tabaqāt-i-Nāsırī, 63 Taboo, 153 Taılor bird, 116 Tattirīya-Brāhmans, 235, 430, 433, 435 Taittirīya Upanishad, 501, 519 Takht-i-Bahi, 72 Takman, 418, 463 Taksha, 295 Takshaka, 324 Takshasila, 324; see also Taxila Talajanghas, 287 Tamil, 145-6, 158, 161 ff. script, 53 Tāmraparnı, 141 Tāndva Brāhmana, 432 Tanjore, 132 Tanning, 401 Taptı, river, 84, 96, 99 Tardenoisian industry, 134 Ta'rīkh-i-Fīrūz Shāhi, 63 Tata, Sir Ratan, 69 Tawi, river, 126 Taxation, 359, 437, 488, 491-2 Taxila, 60, 68-70, 72, 103, 262 Tea, 113 Teachers, Vedic, 523 Teliāgarhi, 99, 102 Teli Agrab, 195 Tell Asmar, 185, 195
Tell el-Amarna, 209
Telugu, 146, 157, 161 ff.
script, 53 Temperature, 108 Temple, Vedic, 505 Terai, Nepalese, 92 Teshup, 161 Tethys sea, 86 Textiles, in Indus Valley culture, 185 Thar desert, 95, 98, 101 Theft, 494

Theoi Apopompaioi, 207

Thomson, 109
Thrushes, 116
Tibet, 94, 169
Tibetans, 169
Tibeto-Chinese speech family, 147
Tibeto-Mongoloids, 144-5
Tiger, 114, 573
Tuber types, 109-10 Timber types, 109-10 Tinnevelly, 132 coast, submerged land, 90 Trhut, 259, Titikshu, 283, 288 Toads, 118 Tobacco, 113 Tocharian, 211 Tocharians, proto-, 222 Tochi, river. 93 Todd, 131 Toilet, in Sütras, 528 Tools, in Indus Valley culture, 182 Tortoises, 118 Totemism, 150, 380 Toys, in Indus Valley culture, 180, 186 Trade, in Brahmanas, 465 in ancient India, 104 in Rigvedic age, 400 in Sūtras, 530 Transmigration, 153, 500 Transport, in Bramanas, 467 in Rigvedic age, 402 in Sutras, 531 Trap, 108 Trasadasyu, 250, 430 Trayyaruna, 290 Tree snake, 118 worship, 192 Trees, 109-11 Tribal organization, 359 Tribes, in post-Rigyedic period, 258-66 in Rigyeda, 248-54 Tribute, 358, 437 Trichinopoly, 132 Trigarts, 306 Trikakud, 255 Trikota, 255 Trinabindu, 396 Tripolje pottery, 214 Triśańku, 289-90 Triśańku, 289-90 Triśa age, 316 Tritsus, 249-51, 257, 310, 312 Triveda, D.S., 220 Tsan-po, river, 95 Tungabhadra, river, 84, 97 Tunny, 119 Tura Kāvasheya, 312, 314 Turkestan, Russian, 210 Chinese, 77 Turks, Ghaznavid, 62 Turtles, 118
Turvas(s), 249-51, 256, 310-2
Turvasu(s), 278, 310-1, 318
Tvashtri, 386 Typhlops, 118 Uchali, 135

Uchali, 135 Uchathya, 291 Udayana, 325 Udayaprabha, 51

Udāyin, 328 Uddālaka Aruņi, 474 Udgātri, 446 Ugrasena, 301 Ugrasena Janaka, 324, 330 Ugrasena Janaka, 324, 330 Ugrayudha, 238-9 Ujjain, 74, 329 Ujjayni, see Ujjain Ukraine, 216 Umā, Dravidian element, 164-5 United Provinces, 102 archaeological sites, 73 Unity of India, 100 Unity of India, 100
Universal monarch, 356
Untouchability, 456
Untouchability, 456
Upanayana, 225, 394, 459, 513-4, 520, 523
Upanishada, 448, 451, 471 ff.
Innguage, 483-4
philosophy of, 496 ff.
Upaplayva, 260
Ur, 178, 182, 188, 185
Ur, 178, 182, 188, 185 Ural-Altaic speech family, 157 Urvasi, 349 Ushas, 366, 372 hymns to, 346 Ushkar, 73 Usina Angiras, 291 Usina Angiras, 291 Usinara(s), 252, 258-9, 266, 283 Uttānapāda, 274 Uttara Pańchāla, 329 Uttarakurus, 262, 266 Uttaramadras, 262, 266 Vadamadurai, 133-4 Vadhryaśva, 297, 311 Vagadhas, 261 Vāhlīka, 306 Vahvī-Dattyā, river, 222 Vaigai, river, 132 Vahvi-Dauya, river, ccc Vaigai, river, 132 Vairadeya, 438, 483, 495 Vaišāla, 276, 279 Vaišāli, 69, 276, 288, 291, 296 Vaisampāyana, 314, 324, 330 Vaisyas, in Brāmanas, 544-Vaisyas, in Sūtras, 513-4 Vānawa, 447, 461 vanyas, in Sutras, 513-4 Vājapeya, 447, 461 Vajus, 331 Vajra, 308 Vājakhilya recension of Rigveda, 230 Vājakhilyas, 280 Valin, 295 Vallam, 132 Välmiki, 298 Valmiti, 298
Varnásávalis, 51
Vänaprastha, 498
Vänarras, 295, 317, 319
Vanga(s), 102, 261, 223, 288, 306, 317
Varábamihira, 272
Varábamihira, 272
Varábami, 33, 290, 328
Varanus, 118
Varanus, 118
Varanus, 118 Varmus, 118
Varmas, see Caste
Varupa, 224-5, 367, 368-9
hymns to, 347
Varupapraghāsa, 457
Vasanta-vilasa, 51
Vasias, 258, 286
Vasiathās, 52, 249, 280, 289
Vastupāla-Tejahpāla-prašasti, 51
Uana, 266, 267 Vasu. 300

Vasu Chaidyoparichara, 314 Vasudeva, 301 Vasudeva, see Krishna Vatsa(s), 289-90, 294, 297, 306, 325, 440, Vatsabhumi, 325 Vatsaprimi, 325 Vatsapri, 280 Vayu-Vata, 366, 376 Vedanga, 476, 520 Vedanta, 353, 424, 471 Vedas, 225-6, 229 ff. historicity, 308 ff. Vena, 275 Verse-makers, 338 Vichitravīrya, 300 Vidarbha, 261, 288, 306, 318 Videgha Māthava, 317 Videghas, 265 Videha(s), 259, 266, 279, 295, 306, 317, 326-7 Vidišā, 74, 288 Vijayanagar, 64 Vijayasena, 54 Vijnot, 199 Vikramādītya, 49 Vikramānka-deva-charīta, 49 Vikukshi, 279 Village, in Rigveda, 402 in Sütras, 492 Vinasana, 255 Vinda, 306, 330 Vindhya mountains, 96, 98, 255, 318 Vipas, river, see Beas Vipers, 118 Virāj, see Manu Svāyambhuva Virampattanam, 76 Virata, 306, 307 Viś. 359 Viśāla, 280, 296 Viśāla, 280, 296 Viśāla, 280, 296 Vishnu, 366, 371, 448 Dravidian elements, 164-5 Dravidian elements, 194-5 Vishanias, 249, 251 Visvakarman, 365, 383 Visvamitra(s), 249, 274, 281, 294, 348-9 Visvamitra (son of Gadhi), 289-90 Vitahavyab(s), 258, 266 Vitastā, rīver, see Jhelum Vitatha, 292, 296 VItihotras, 287, 323, 330 Vogel, Dr., 69 Volcanoes, 89 Vratyas, 261 Vrichīvants, 251 Vriddha-Garga, 272 V-i-hadarbhas, 283 Vrishadarbhas. Vrishni(s), 302, 306 Vritra, 373-4 Vultures, 117 Vyakarana-Vedanga, 481 Vvasa, 307

Wackernagel, 340 Warblers, 116 Werfare, methods of, 358-9, 492 Warsora, 129 Water cock, 117 Waters, the, and Varuna, 369

Weapona, SS8 in Indus Valley culture, 182 in Indus Valley culture, 182 in Indus Valley culture, 182 in Indus Valley Culture, 185 in Indus Valley culture, 186 in Indus Valley culture, 186 Weights, in Indus Valley culture, 186 Weights In Indus Valley Charles Valley

Woodpecker, 116

Worms, 121 Writing, in Vedic age, 395, 460

Xerxes, 224

Yadava(s), 278, 281-2, 288-90, 297, 300-1, 301-3, 306-7, 311, 319 Yadu(s), 249, 251, 256, 278, 300, 310, 320

Yajnavalkya, 330, 520 Yajnavalkya Vajassneya, 229 Yajurveda, 229, 235-6 contents, 419 language, 468-9 religion in, 454-6 Yakshua, 249, 231 Yale-Cambridge Expedition, 125, 130 Yane, 226, 368, 354

Yama, 226, 368, 384 Yamura, river, 246 Yaska, 231, 247, 264, 312, 344 ff., 481-2 Yasivar, 227 Yaudheyas, 58, 283 Yavanna, 318 Yayati, 278, 311 Yerra-tonda-Palem, 133

Yerra-konga-Palem, 133 Yoga, 160, 162 Yoni, in Indus Valley culture, 191 Yudhishthira, 273, 300, 304 ff. Yuvanāšva II, 279, 283, 311 Yuyudhāna, 306

Zain ul-Abidin, 51 Zarathustra, 224-7, 364 Zimmer, H, 245-8, 250-3, 259, 282-3 Ziya-ud-din Barani, 63 Zoomorphic gods, 166-7